HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE MANUAL BA-4D CHASSIS

MODEL NAME	REMOTE COMMANDER	DESTINATION	CHASSIS NO.
KV-27S42	RM-Y165	US	SCC-S27H-A
KV-27S42	RM-Y165	CND	SCC-S28F-A
KV-27S46	RM-Y167	US	SCC-S27K-A
KV-27S66	RM-Y167	US	SCC-S27L-A
KV-27S66	RM-Y167	CND	SCC-S28G-A
KV-29AL42	RM-Y165	E	SCC-S25U-A
KV-29AL42C	RM-Y165	E	SCC-S25Y-A
KV-29AL66	RM-Y167	E	SCC-S25T-A
KV-29AL66C	RM-Y167	E	SCC-S25V-A
KV-29SL42	RM-Y165	E	SCC-S25W-A
KV-29SL42C	RM-Y165	E	SCC-S25S-A
KV-29SL46	RM-Y167	E	SCC-S25X-A
KV-29XL42M	RM-Y165	MX	SCC-S26C-A
KV-29SL43	RM-Y165	E	SCC-S55C-A
KV-29SL43C	RM-Y165	E	SCC-S55D-A

ORIGINAL MANUAL ISSUE DATE: 4/1999

ALL REVISIONS AND UPDATES TO THE ORIGINAL MANUAL ARE APPENDED TO THE END OF THE PDF FILE.

REVISION DATE	REVISION TYPE	SUBJECT
6/1999	CORRECTION-1	CRT PART NUMBER CORRECTION FOR KV-27S66
9/1999	CORRECTION-2	DY PART NUMBER CORRECTION
5/2001	SUPPLEMENT-1	NEW MODEL ADDED: KV-29SL43
8/2001	SUPPLEMENT-2	NEW MODEL ADDED: KV-29SL43C
8/2001	CORRECTION-3	Q550 PART NUMBER CORRECTION-PAGE 55

WEIXIUZHIJIA 维修之家

9-965-8

TRINITRON® COLOR TELEVISION

SONY®

Self Diagnosis Supported model

SERVICE MANUAL

BA-4D CHASSIS

MODEL	COMMANDER	DEST	CHASSIS NO.
KV-27S42	RM-Y165	US	SCC-S27H-A
KV-27S42	RM-Y165	CND	SCC-S28F-A
KV-27S46	RM-Y167	US	SCC-S27K-A
KV-27S66	RM-Y167	US	SCC-S27L-A
KV-27S66	RM-Y167	CND	SCC-S28G-A
KV-29AL42	RM-Y165	E	SCC-S25U-A
KV-29AL42C	RM-Y165	E	SCC-S25Y-A
KV-29AL66	RM-Y167	E	SCC-S25T-A
KV-29AL66C	RM-Y167	E	SCC-S25V-A
KV-29SL42	RM-Y165	E	SCC-S25W-A
KV-29SL42C	RM-Y165	E	SCC-S25S-A
KV-29SL46	RM-Y167	E	SCC-S25X-A
KV-29XL42M	RM-Y165	MX	SCC-S26C-A

KV-29AL66

RM-Y167

MICROFILM

TRINITRON® COLOR TV

SONY®

SPECIFICATIONS

	KV-27S42	KV-27S46 KV-27S66	KV-29AL42 KV-29AL42C	KV-29AL66C KV-29AL66	KV-29SL46 KV-29XL42M KV-29SL42 KV-29SL42C
Power Requirements	120V,60Hz	120V,60Hz	120-220V 50/60Hz	120-220V 50/60Hz	120-220V 50/60Hz
Number of input/outputs					
Video[1]	1	2	2	3	1, 2(KV-29SL46)
S Video[2]	1	1	1	1	1
Audio[3]	1	2	2	3	1, 2(KV-29SL46)
Audio Out[4]	1	1	1	1	1
Monitor Out	-	-	-	1	-
Speaker Output(W)	5WX2	5WX2	10WX2	10WX2	5WX2
Power Consumption(W)		150W (KV-27S66)			
In Use (Max)	140W	140W (KV-27S46)	170W	180W	140W
In Standby	2W	2W	3W	3W	3W
Dimensions(W/H/D)					
(mm)	660.4X598 X505.5mm	660.4X598 X505.5mm	767.4X579.7 X547.7mm	767.4X579.7 X547.7mm	660.4X598 X505.5mm
(in.)	26x23$^{9/16}$x20in	26x23$^{9/16}$x20in	30$^{1/4}$X22$^{7/8}$x21$^{5/8}$in	30$^{1/4}$X22$^{7/8}$x21$^{5/8}$in	26x23$^{9/16}$x20in
Mass (Kg)	39kg	39kg	42kg	42kg	39kg
(lbs)	86lbs	86lbs	93lbs	93lbs	86lbs

Television system

American TV standard/NTSC

Channel coverage

VHF:2-13 / UHF:14-69 / CATV:1-125

Picture tube

Trinitron® tube

Visible screen size

27-inch picture measured diagonally
29-inch picture measured diagonally

Antenna

75 ohm external antenna terminal for VHF/UHF

Supplied accessories

Remote Commander with 2 size AA (R6) batteries
RM-Y167 (KV-29AL66/29AL66C/29SL46/27S46/27S66)
RM-Y165 (KV-29AL42/29AL42C/27S42/29XL42M/29SL42/29SL42C)

Optional accessories

Connecting Cables: VMC-810S/820S, VMC-720M.
YC-15V/20V, RK-74A

TV Stand: SU-27A4
U/V Mixer: EAC-66

[1] 1 Vp-p 75 ohms unbalanced, sync negative
[2] Y: 1 Vp-p 75 ohms unbalanced, sync negative
C: 0.286 Vp-p (Burst signal), 75 ohms
[3] 500 mVrms (100% modulation), Impedance: 47 kilohms
[4] More than 408 mVrms at the maximum volume setting (variable)
More than 408 mVrms (fix); Impedance: 5 kilohms

(●) SRS (SOUND RETRIEVAL SYSTEM)

The (●) SRS (SOUND RETRIEVAL SYSTEM) is manufactured by Sony Corporation under license from SRS Labs, Inc. It is covered by U.S. Patent No. 4,748,669. Other U.S. and foreign patents pending.

The word 'SRS' and the SRS symbol (●) are registered trademarks of SRS Labs, Inc.

BBE and BBE symbol are trademarks of BBE Sound, Inc. and are licensed by BBE Sound, Inc. under U.S. Patent No. 4,638,258 and 4,482,866.

Design and specifications are subject to change without notice.

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WARNINGS AND CAUTIONS

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS, AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.
ATTENTION

ATTENTION!!

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION!!

AFIN D'EVITER TOUT RESQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

LES COMPOSANTS IDENTIFIES PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES SCHEMAS DE PRINCIPE, LES VUES EXPLOSEES ET LES LISTES DE PIECES SONT D'UNEIMPORTANCE CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMERO DE PIECE EST INDIQUE DANS LE PRESENT MANUEL OU DANS DES SUPPLEMENTS PUBLIES PAR SONY. LES REGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRESENT MANUEL. SUIVRE CES PROCEDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONTIONNEMENT SUSPECTE.

SELF-DIAGNOSTIC FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER LED will automatically begin to flash. The number of times the LED flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER LED flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the Remote Commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

Diagnostic Test Indicators

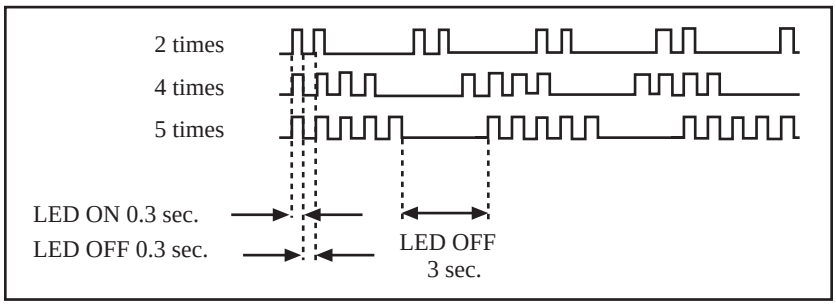
When an error occurs, the STANDBY/TIMER LED will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the LED will identify the first of the problem areas.
Results for all of the following diagnostic items are displayed on screen. No error has occurred if the screen displays a "0".

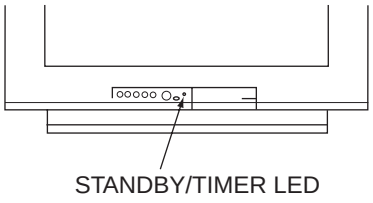
Diagnostic Item Description	No. of times STANDBY/TIMER lamp flashes	Display/ Diagnostic result	Probable Cause Location	Detected Symptoms
* Power does not turn on	Does not light		* Power cord is not plugged in. * Fuse is burned out (F5050) (E Board)	* Power does not come on. * No power is suppled to the TV. * AC power supply is faulty.
* +B overcurrent (OCP)	2 times	2:0 or 2:1	* H.OUT (Q502) is shorted. (A board) * IC1751 is shorted. (C board) * IC1701 is shorted. (CV board)	* Power does not come on. * Load on power line is shorted.
* Vertical deflection stopped*	4 times	4:0 or 4:1	* +13V is not supplied. (A board) * IC 541 is faulty (A board)	* Has entered standby state after horizontal raster. * Vertical deflection pulse is stopped. * Power line is shorted or power supply is stopped.
* White balance failure (not balanced)	5 times	5:0 or 5:1	* Video OUT (Q306 to 308) is faulty.(A bd) * IC301 is faulty. (A board) * G2 is improperly adjusted**.	* No raster is generated. * CRT cathode current detection reference pulse output is small.

***** If a +B overcurrent is detected, stoppage of the vertical deflection is detected simulatneously. The symptom that is diagnosed first by the microcontroller is displayed on the screen.

****** Refer to Screen (G2) Adjustment in Section 3-4 of this manual.

Display of Standby/Timer LED Flash Count





Diagnostic Item	Flash Count*
+B overcurrent	2 times
Vertical deflection stopped	4 times
White balance failure	5 times

*One flash count is not used for self-diagnostic.

Stopping the Standby/Timer LED Flash

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER LAMP from flashing.

Self-Diagnostic Screen Display

For errors with symptoms such as “power sometimes shuts off” or “screen sometimes goes out” that cannot be confirmed, it is possible to bring up past occurrences of failure on the screen for confirmation.

To Bring Up Screen Test

In standby mode, press buttons on the Remote Commander sequentially, in rapid succession, as shown below:

Display ➡ Channel 5 ➡ Sound volume − ➡ Power ON

⇧

Note that this differs from entering the service mode (sound volume +).

Self Diagnostic Screen Display

SELF DIAGNOSTIC

2:		0 ← Numeral “0” means that no fault was detected.
3:	N/A	0
4:		0
5:		1 ← Numeral “1” means a fault was detected one time only.
101:	N/A	0

Handling of Self-diagnostic Screen Display

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to “0”.

Unless the result display is cleared to “0”, the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

Clearing the Result Display

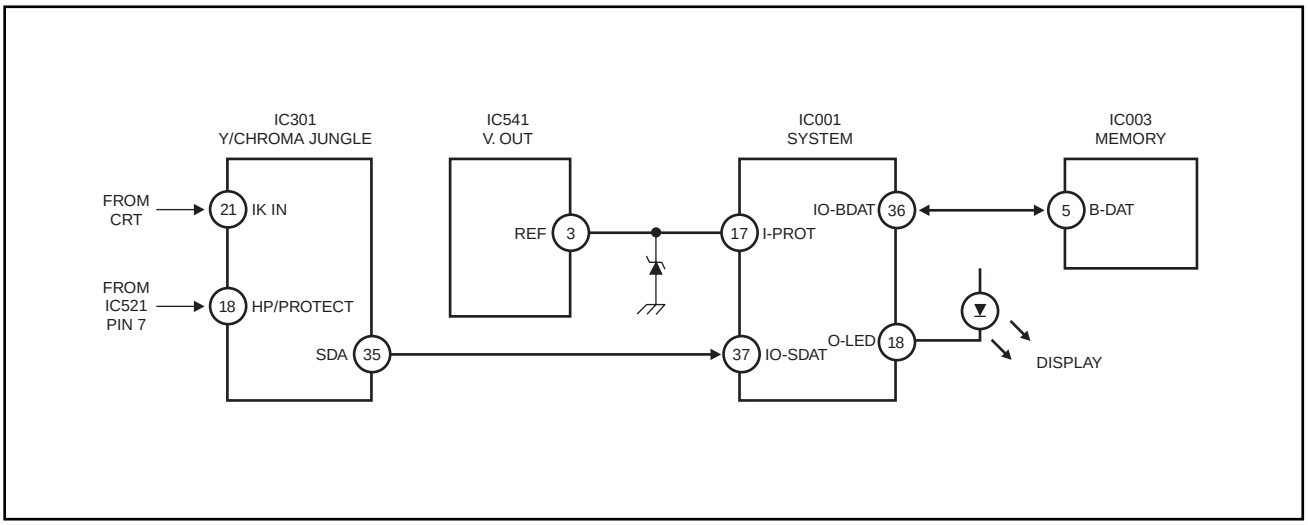
To clear the result display to “0”, press buttons on the Remote Commander sequentially when the diagnostic screen is displayed, as shown below:

Channel 8 ➡ ENTER

Quitting the Self-Diagnostic Screen

To quit the entire self-diagnostic screen, turn off the power switch on the Remote Commander or the main unit.

Self-diagnostic Circuit



+B overcurrent (OCP)

Occurs when an overcurrent on the +B (115V) line is detected by pin 18 of IC301. If the voltage of pin 18 of IC 301 is less than 1V when V.SYNC is more than seven verticals in a period, the unit will automatically turn off.

Vertical deflection stopped

Occurs when an absence of the vertical deflection pulse is detected by pin 17 of IC001. Power supply will shut down when waveform interval exceeds 2 seconds.

White balance failure

If the RGB levels* do not balance within 2 seconds after the power is turned on, this error will be detected by IC301. TV will stay on, but there will be no picture.

*(Refers to the RGB levels of the AKB detection Ref pulse that detects 1K.)

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are “pinched” or touching high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

Leakage Test

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampere). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instructions.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson’s 250 and Sanwa SH-63Trd are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).

How to Find a Good Earth Ground

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60- to 100-watt trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential (see Figure B).

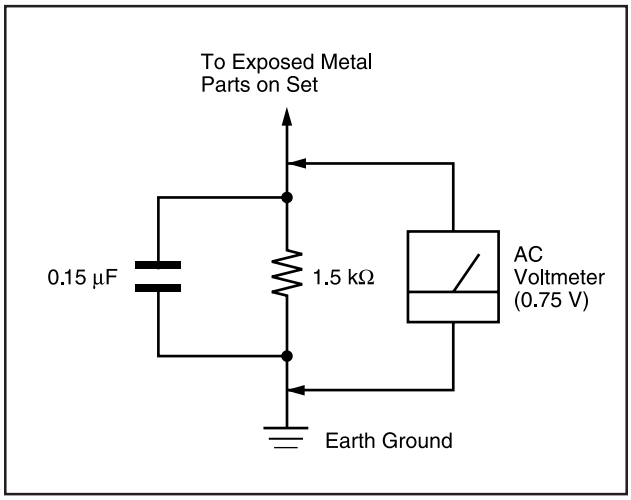


Figure A. Using an AC voltmeter to check AC leakage.

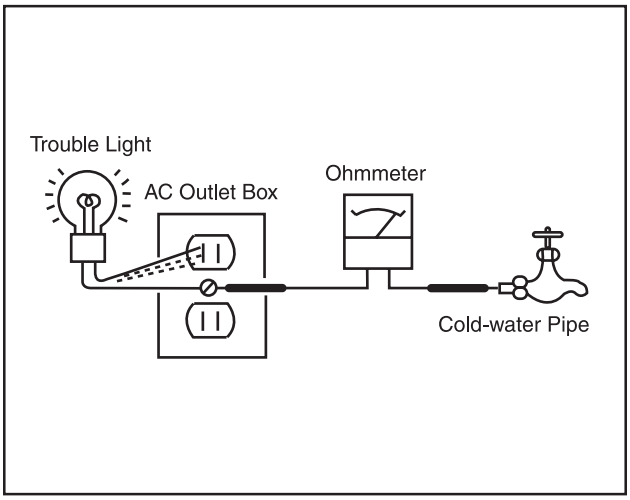


Figure B. Checking for earth ground.

SECTION 1
GENERAL

The following are partial abstracts from the Operating Instruction Manual. The page numbers shown reflect those of the Operating Instruction Manual.

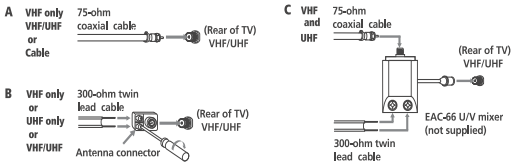
Connecting Your TV

This section covers basic connections in addition to any optional equipment you may be connecting.

Basic Connections

TV with indoor or outdoor antenna, or CATV cable

Depending on the cable available in your home, choose one of the connections below:

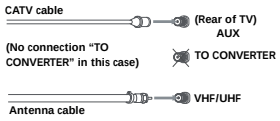

A VHF only VHF/UHF or Cable
75-ohm coaxial cable
(Rear of TV) VHF/UHF
B VHF only or UHF only or VHF/UHF
300-ohm twin lead cable
(Rear of TV) VHF/UHF
Antenna connector
C VHF and UHF
75-ohm coaxial cable
(Rear of TV) VHF/UHF
EAC-66 U/V mixer (not supplied)
300-ohm twin lead cable

If you are connecting to an indoor or outdoor antenna, it will be necessary to adjust the orientation of the antenna for best reception.

Cable and antenna

KV-27S66, 27V66 only

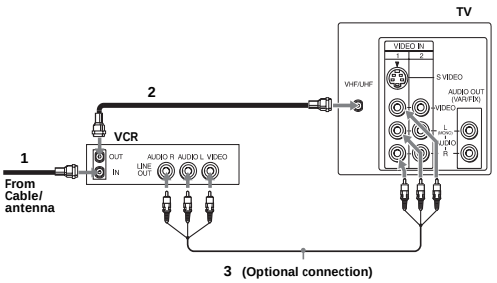
If your cable provider does not feature local channels, you may find this set up convenient.



Select CABLE or ANT mode by pressing ANT on the remote control.

Connecting Additional Equipment

TV and VCR



! VCR must be connected and turned on to operate PIP. (KV-27S46 only)

1 Connect the coaxial cable from your TV antenna or cable TV to the IN jack on your VCR.

2 Connect a coaxial cable (not supplied) from the OUT jack on your VCR to the VHF / UHF IN jack on the TV.

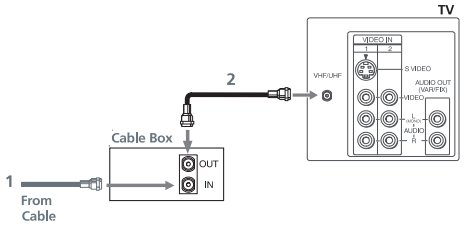
To watch video programs from your VCR, tune your TV to channel 3 or 4 (as set on the rear of your VCR).

(Optional connection)

3 If your VCR is equipped with video inputs, for better picture quality you should connect A / V cables to AUDIO and VIDEO OUT on your VCR to AUDIO / VIDEO IN on your TV. You can use the TV/VIDEO button to switch between the TV and VCR inputs.

For optimum picture quality, use S VIDEO instead of the yellow A/V cable. S VIDEO does not provide sound, the audio cables must still be connected.

TV and Cable Box



1 Connect the coaxial cable from the wall to the IN jack on your cable box.

2 Connect a coaxial cable (not supplied) from the OUT jack on your cable box to the VHF / UHF IN jack on the TV.

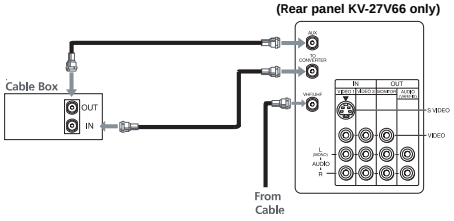
To view channels from your cable box, tune your TV to channel 3 or 4 (as set on the rear panel of your cable box).

If you will be controlling all channel selection through your cable box, you should consider using the CHANNEL FIX feature on page 24.

TV, Cable box and Cable

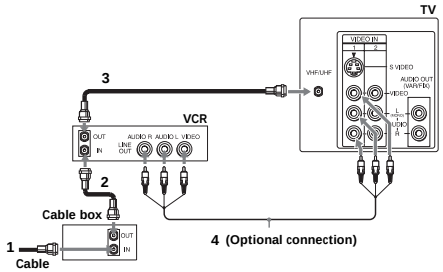
KV-27S66, 27V66 only

For this set up, you can switch between scrambled channels (through your cable box), and normal (CATV) channels by pressing ANT on your remote control.



When using PIP, the AUX input cannot be viewed in the window picture.

TV, VCR, and Cable box



1 Connect the coaxial cable from the wall to the IN jack on your cable box.

2 Connect a coaxial cable (not supplied) from the OUT jack on your cable box to the IN jack on your VCR.

3 Connect a coaxial cable (not supplied) from the OUT jack on your VCR to the VHF / UHF IN jack on the TV.

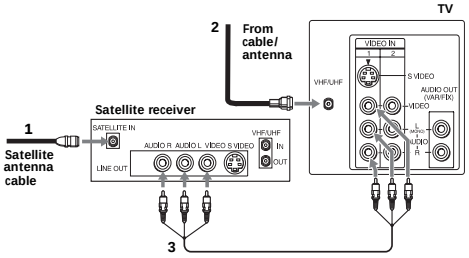
If you will be controlling all channel selection through your cable box, you should consider using the CHANNEL FIX feature on page 24.

(Optional connection)

4 If your VCR is equipped with video inputs, for better picture quality you should connect A / V cables to AUDIO and VIDEO OUT on your VCR to AUDIO / VIDEO IN on your TV. You can use the TV/VIDEO button to switch between the TV and VCR inputs.

For optimum picture quality, use S VIDEO instead of the yellow A/V cable. S VIDEO does not provide sound, the audio cables must still be connected.

TV and Digital Satellite Receiver



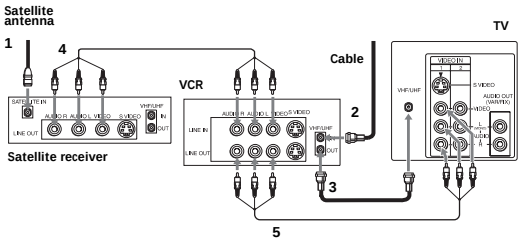
1 Connect the cable from your satellite antenna to SATELLITE IN on the satellite receiver.

2 Attach the coaxial connector from your cable or antenna to VHF / UHF IN on your TV.

3 Using A / V connectors, connect AUDIO and VIDEO OUT on your satellite receiver to AUDIO and VIDEO IN on your TV. You can use the TV/VIDEO button to switch between the satellite receiver and the TV.

For optimum picture quality, use S VIDEO instead of the yellow A/V cable. S VIDEO does not provide sound, your audio connectors must still be connected.

TV, Digital Satellite Receiver and VCR



1 Connect the cable from your satellite antenna to SATELLITE IN on the satellite receiver.

2 Attach the coaxial connector from your cable or antenna to VHF / UHF IN on your VCR.

3 Using a coaxial cable, connect VHF / UHF OUT on your VCR to VHF / UHF IN on your TV.

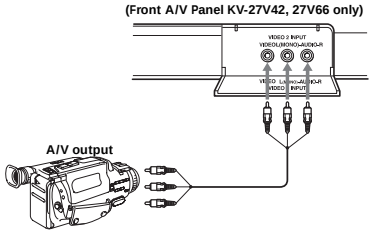
4 Using A / V connectors, connect AUDIO and VIDEO OUT on your satellite receiver to AUDIO and VIDEO IN on your VCR.

5 Using A / V connectors, connect AUDIO and VIDEO OUT on your VCR to AUDIO and VIDEO IN on your TV.

To view from the satellite or VCR, select the video input to which your satellite receiver or VCR is connected by pressing TV/VIDEO on the remote control.

Connecting a Camcorder

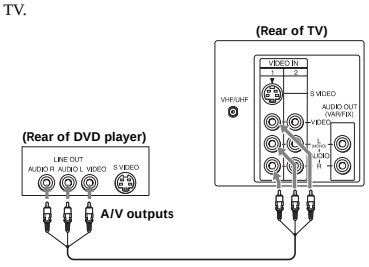
Using A / V cables, connect AUDIO and VIDEO OUT on your camcorder to AUDIO and VIDEO IN on your TV.



Connection can also be made to the rear A/V panel of your TV.

Connecting a DVD Player

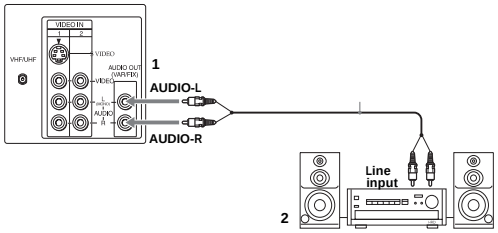
Using A / V connectors, connect LINE OUT on your DVD to VIDEO IN on your TV.



For optimum picture quality, use S VIDEO instead of the yellow A/V cable. S VIDEO does not provide sound, your audio connectors must still be connected.

Connecting an audio system

Using audio connectors, connect AUDIO OUT on your TV to one of the unused line inputs (e.g. TV, AUX, TAPE 2) on your stereo.

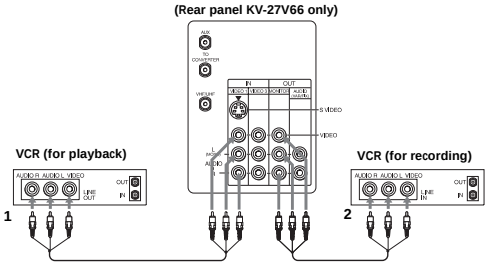


Set your stereo to the chosen line input. (See page 20 for additional audio setup instructions.)

Connecting two VCRs for Tape Editing

KV-27V42, 27V66 only

MONITOR OUT gives you the ability to use a second VCR to record a program being played by the primary VCR to perform tape editing.



1 Connect the VCR intended for playback using the setup instructions on page 4 of this manual.

2 Using A / V connectors, connect AUDIO and VIDEO IN on your VCR intended for recording to MONITOR AUDIO and VIDEO OUT on your TV.

To perform tape editing; set the TV to the video input intended for playback by pressing TV/VIDEO on the remote control.

Troubleshooting

If you are having a problem with your TV, try the suggestions below. If the problem persists, contact your nearest Sony dealer.

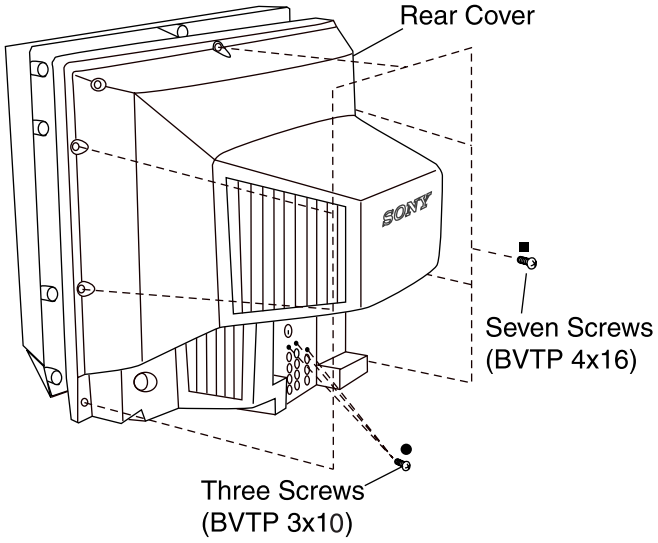
Cannot operate single tuner PIP (KV-27S46)	❑ Make sure the VCR is connected correctly (see page 4). ❑ Check to see if the VCR is on. ❑ Make sure your remote control is programmed to operate your VCR (see page 31).
No picture, no sound	❑ Make sure the power cord is plugged in. ❑ If a red light is flashing on the front of your TV for more than a few minutes, call your local service center. ❑ Check the TV / VIDEO settings: when watching TV, set to TV; when watching video equipment, set to VIDEO (page 19). ❑ Make sure the batteries have been inserted correctly into the remote control. ❑ Check your PARENTAL CONTROL settings (pages 28-29). ❑ Try another channel, it could be station trouble.
Poor or no picture, good sound	❑ Adjust PICTURE in the VIDEO menu (page 19). ❑ Adjust BRIGHTNESS in the VIDEO menu (page 19). ❑ Check the antenna and / or cable connections (page 3).
Good picture, no sound	❑ Press MUTING so that MUTING disappears from the screen (page 13). ❑ Check your AUDIO settings. Your TV may be set to SAP (page 21).
No color	❑ Adjust COLOR in the VIDEO menu (page 19).
Only snow appears on the screen	❑ Check the CABLE setting in the CHANNEL SET UP menu (page 24). ❑ Check the antenna and / or cable connections (page 3). ❑ Make sure the channel selected is currently broadcasting. ❑ Press the ANT button on the remote control.

Dotted lines or stripes	❑ Adjust the antenna. ❑ Move the TV away from other electronic equipment. Some electronic equipment can create electrical noise, which can interfere with TV reception.
Double images or ghosts	❑ Check your outdoor antenna or call your cable service.
Cannot receive higher number channels (UHF) when using an antenna	❑ Make sure CABLE is set to OFF in the CHANNEL SET UP menu (page 24). ❑ Use AUTO PROGRAM to add channels that are not presently in the memory (page 24).
Cable stations don't seem to work	❑ Make sure CABLE is set to ON in the CHANNEL SET UP menu (page 24). ❑ Use AUTO PROGRAM to add channels that are not presently in the memory (page 24).
Remote Control does not operate	❑ Batteries could be weak. Replace them (page 2). ❑ Move the TV 3-4 feet away from fluorescent lights.
The TV needs to be cleaned	❑ Clean the TV with a soft dry cloth. Never use strong solvents such as thinner or benzine, which might damage the finish of the cabinet.
Lost password for PARENTAL CONTROL	❑ In the password screen, enter the following master password: 4357. After using the master password, you must create a new password, it cannot be used to unlock currently blocked channels.

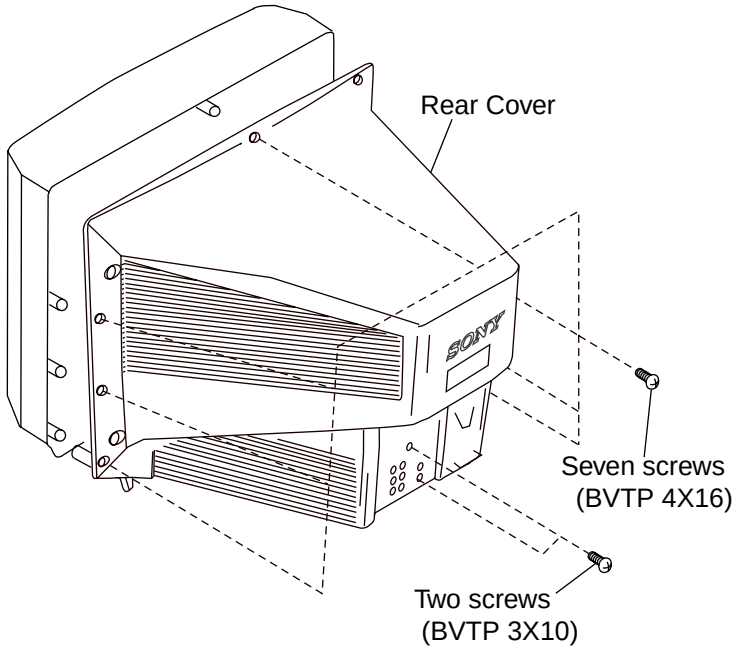
If, after reading these operating instructions, you have additional questions related to the use of your Sony television, please call our Direct Response Center at 1-800-222-SONY (7669) (U.S. residents only) or (416) 499-SONY (7669) (Canadian residents only).

SECTION 2
DISASSEMBLY

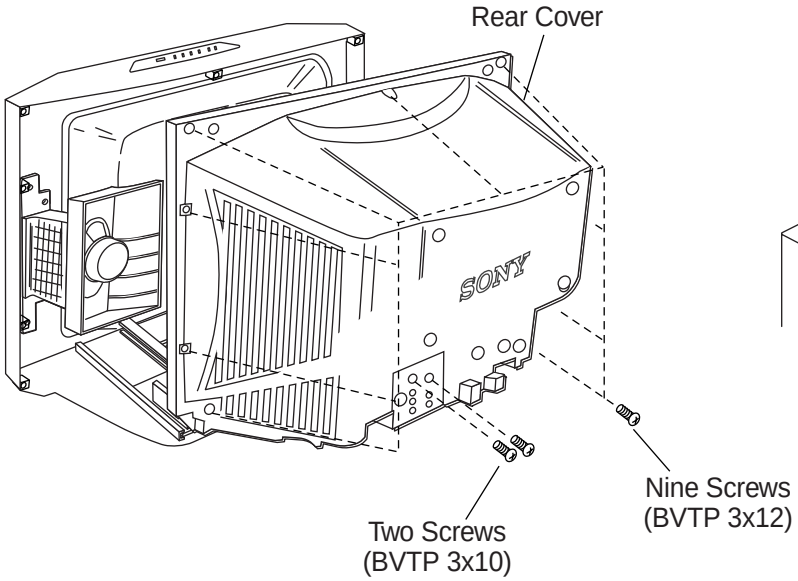
2-1. REAR COVER REMOVAL
(KV-27S46/27S66)



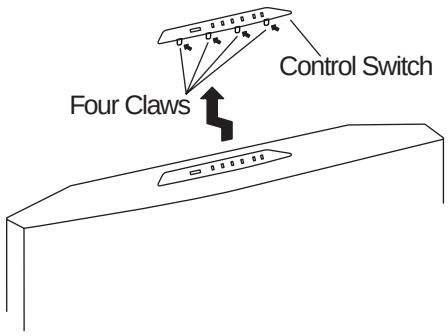
2-2. REAR COVER REMOVAL
(KV-29SL42/29SL42C/29SL46/29XL42M)



2-3. REAR COVER REMOVAL
(KV-29AL42/29AL42C/29AL66/29AL66C)

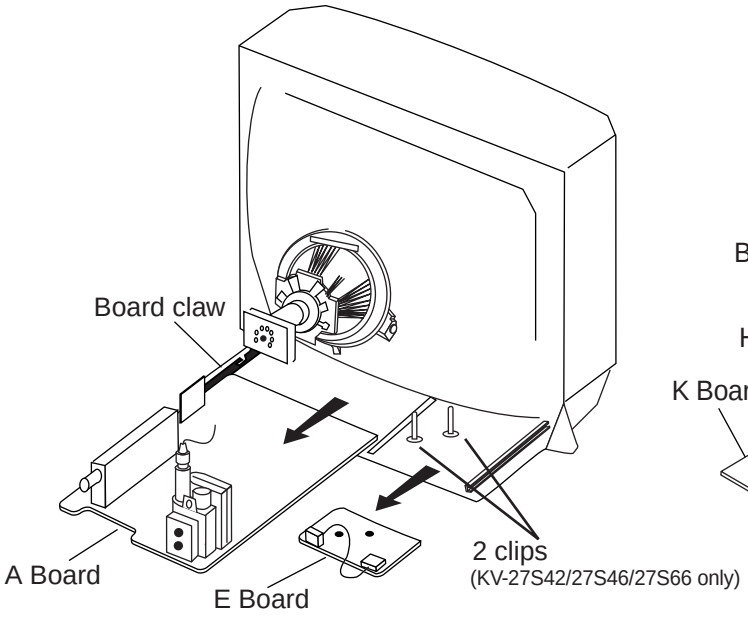


2-4.CONTROL SWITCH REMOVAL
(KV-29AL42/29AL42C/29AL66/29AL66C)



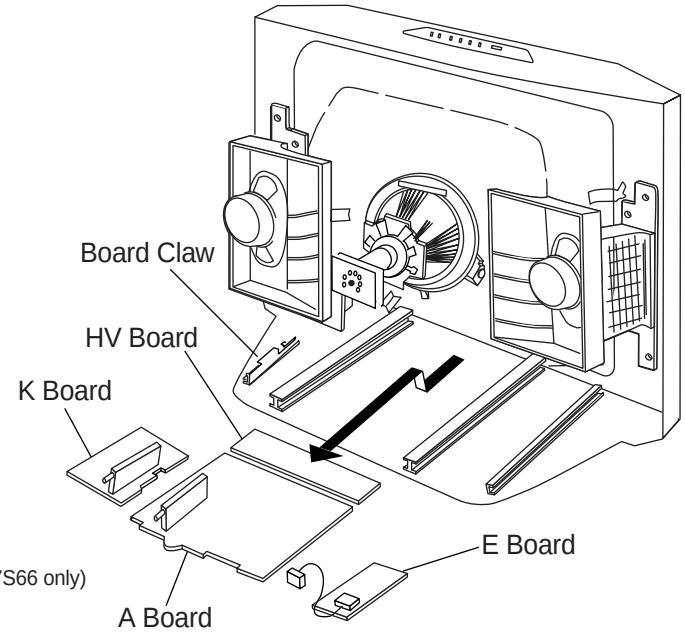
2-5. CHASSIS ASSEMBLY REMOVAL

(KV-27S46/27S66/29SL42/29SL42C/29SL46/29XL42M)

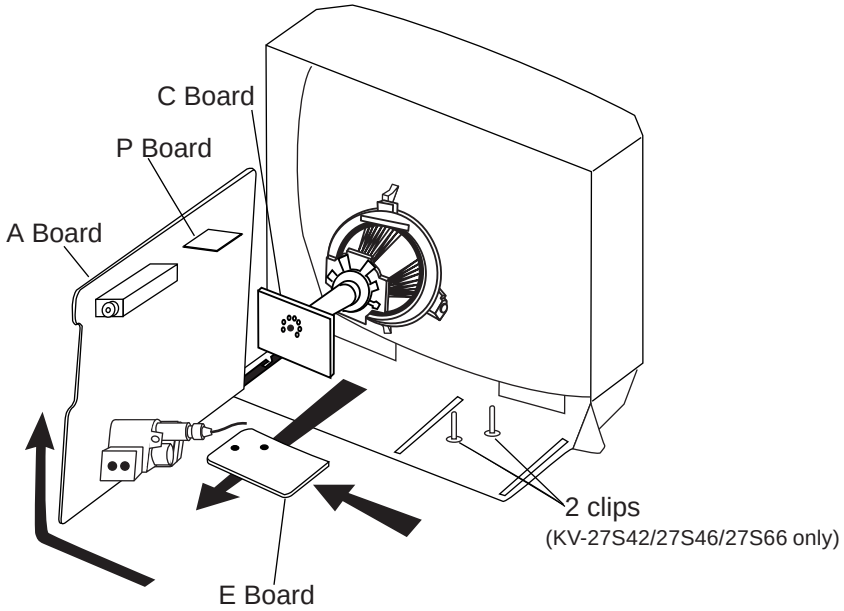


2-6. CHASSIS ASSEMBLY REMOVAL

(KV-29AL42/29AL42C/29AL66/29AL66C)



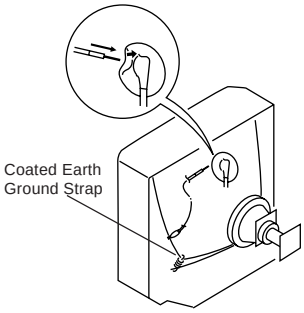
2-7. SERVICE POSITION

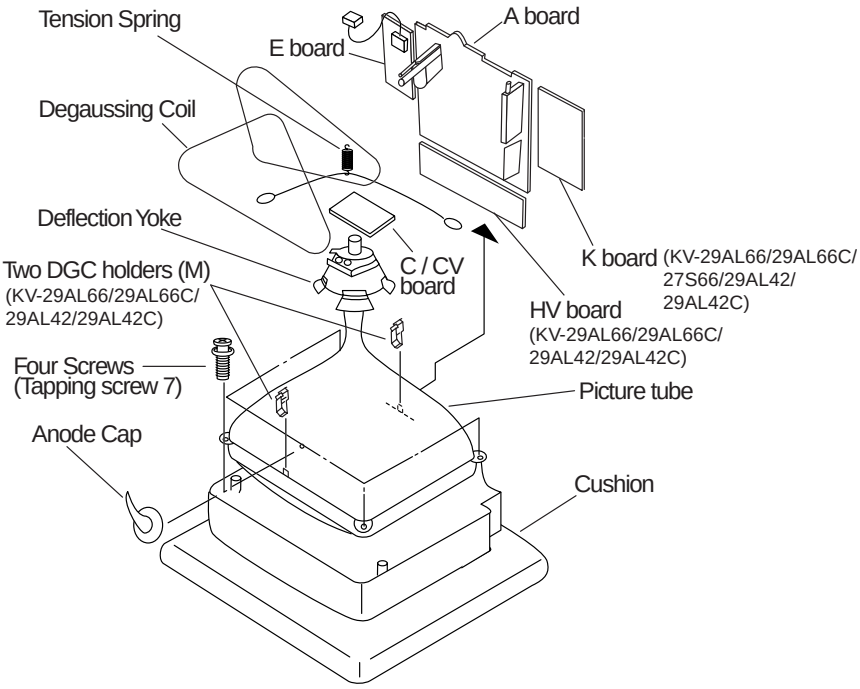


2-8. PICTURE TUBE REMOVAL

WARNING:
BEFORE REMOVING
THE ANODE CAP

High voltage remains in the CRT even after the power is disconnected. To avoid electric shock, discharge CRT ***before*** attempting to remove the anode cap. Short between anode and CRT coated earth ground strap.



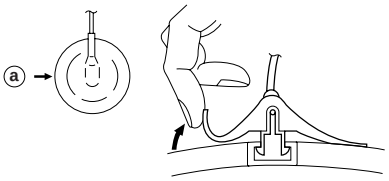


ANODE CAP REMOVAL

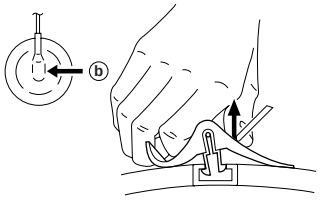
WARNING: High voltage remains in the CRT even after the power is disconnected. To avoid electrical shock, discharge the CRT **before** attempting to remove the anode cap. Short between anode and coated earth ground strap of CRT.

NOTE: After removing the anode, short circuit the anode of the picture tube and the anode cap to either the metal chassis, CRT shield, or carbon painted on the CRT.

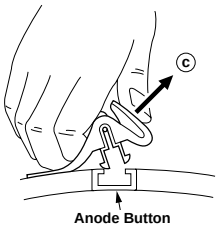
REMOVAL PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by arrow ⓐ.



② Use your thumb to pull the rubber cap firmly in the direction indicated by arrow ⓑ.



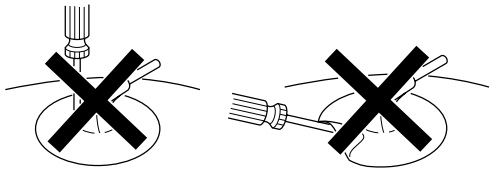
③ When one side of the rubber cap separates from the anode button, the anode cap can be removed by turning the rubber cap and pulling it in the direction of arrow ⓒ.

HOW TO HANDLE AN ANODE CAP

① Do not use sharp objects which may cause damage to the surface of the anode cap.

② To avoid damaging the anode cap, do not squeeze the rubber covering too hard. A material fitting called a shatter-hook terminal is built into the rubber.

③ Do not force turn the foot of the rubber cover. This may cause the shatter-hook terminal to protrude and damage the rubber.



SECTION 3
SET-UP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or when a new picture tube is installed.

These adjustments should be performed with rated power supply voltage unless otherwise noted.

Set the controls as follows unless otherwise noted.

VIDEO MODE: STANDARD
PICTURE control: ..... Normal
BRIGHTNESS control ..... Normal

Perform the adjustments in order as follows:
1. Beam Landing
2. Convergence
3. Focus
4. Screen (G2)
5. White Balance

Note: Test equipment required:
- Color bar pattern generator
- Degausser
- DC power supply
- Digital multimeter

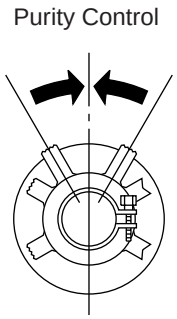
3-1. BEAM LANDING

Before beginning adjustment procedure:

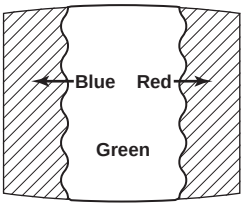
1. Degauss the entire screen.
2. Feed in the white pattern signal.

Adjustment Procedure

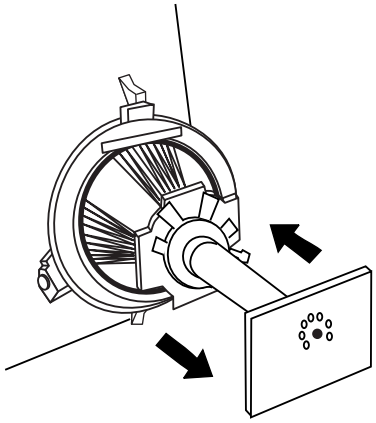
1. Input a raster signal with the pattern generator.
2. Loosen the deflection yoke mounting screw and set the purity control to the center as shown below.



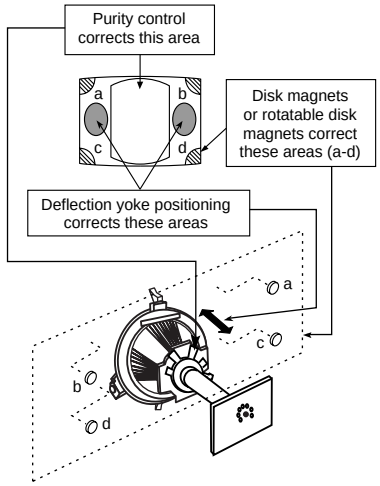
3. Turn the raster signal of the pattern generator to green.
4. Move the deflection yoke backward and adjust the purity control so that green is in the center and red and blue are at the sides evenly.



5. Move the deflection yoke forward and adjust so that the entire screen becomes green.



6. Switch over the raster signal to red and blue and confirm the condition.
7. When the position of the deflection yoke is determined, tighten it with the deflection yoke mounting screw.
8. If landing at the corner is not right, adjust by using the disk magnets.



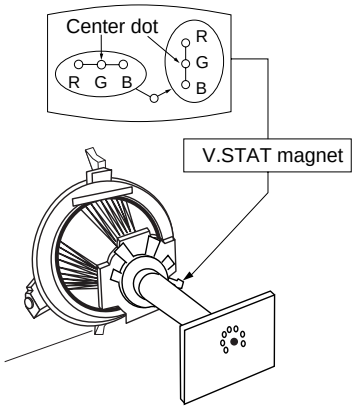
3-2. CONVERGENCE

Before starting convergence adjustments:

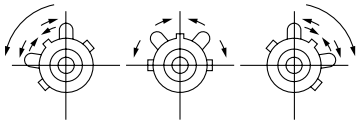
1. Perform FOCUS, V.LIN AND V.SIZE adjustments.
2. Set BRIGHTNESS control to minimum.
3. Feed in dot pattern.

Vertical Static Convergence

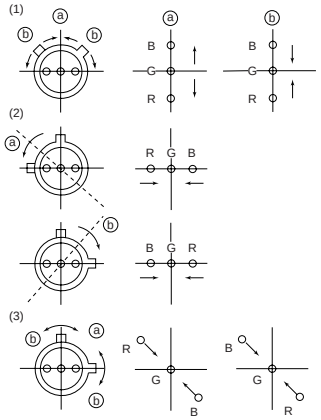
1. Adjust V.STAT magnet to converge red, green and blue dots in the center of the screen. (Vertical movement)



2. Tilt the V.STAT magnet and adjust static convergence to open or close the V.STAT magnet.



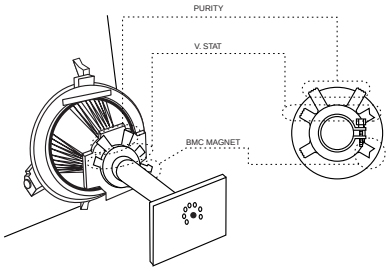
When the V.STAT magnet is moved in the direction of arrows ⓐ and ⓑ, red, green, and blue dots move as shown below:

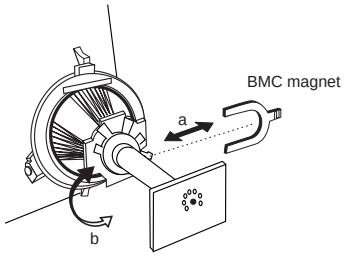


Horizontal Static Convergence

If the blue dot does not converge with the red and green dots, perform the following:

1. Move BMC magnet (a) to correct insufficient H. Static convergence.
2. Rotate BMC magnet (b) to correct insufficient V. Static convergence.
3. After adjusting the BMC magnet, repeat Beam Landing Adjustment.

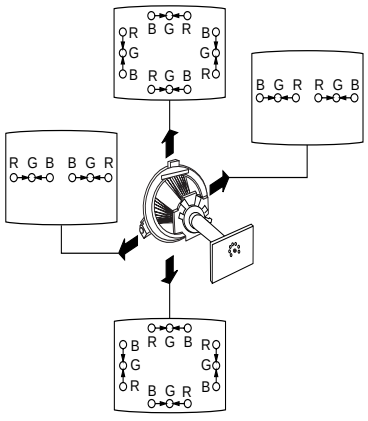




Dynamic Convergence Adjustment

Before performing this adjustment, perform Horizontal and Vertical Static Convergence Adjustment.

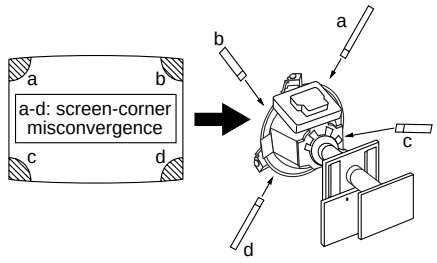
1. Slightly loosen deflection yoke screw.
2. Remove deflection yoke spacers.
3. Move the deflection yoke for best convergence, as shown below:



4. Tighten the deflection yoke screw.
5. Install the deflection yoke spacers.

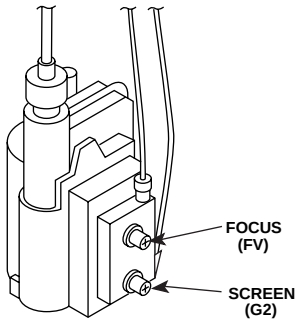
Screen-Corner Convergence

1. Affix a permalloy assembly corresponding to the misconverged areas.



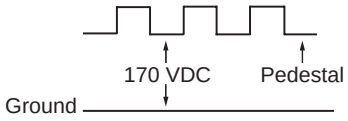
3-3. FOCUS

1. Adjust FOCUS control for best picture.



3-4. SCREEN (G2)

1. Input a dots pattern.
2. Set the PICTURE and BRIGHTNESS controls at minimum and COLOR control at normal.
3. Adjust SBRT, GCUT, BCUT in service mode with an oscilloscope as shown below so that voltages on the red, green, and blue cathodes are 170 VDC.



4. Observe the screen and adjust SCREEN (G2) VR in FBT to obtain the faintly visible background of dot signal.

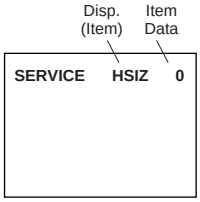
3-5. METHOD OF SETTING THE SERVICE ADJUSTMENT MODE

Service Mode Procedure

1. Standby mode (power off).
2. [Display] ➡ Channel [5] ➡ Sound volume [+] ➡ Power on the Remote Commander (press each button within a second).

Service Adjustment Mode In

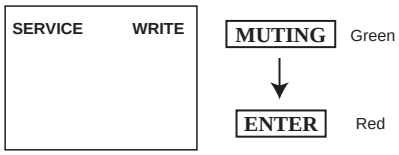
1. The CRT displays the item being adjusted.



2. Press [1] or [4] on the Remote Commander to select the item.
3. Press [3] or [6] on the Remote Commander to change the data.
4. Press [MUTING] then [ENTER] to save into the memory.

Service Adjustment Mode Memory

Turn set off then on to exit service adjustment mode.



3-6. WHITE BALANCE ADJUSTMENTS

1. Input an entire white signal with burst.
2. Set to Service Adjustment Mode.
3. Set DCOL to “0”.
4. Set the PICTURE and BRIGHTNESS to minimum.
5. Adjust with SBRT if necessary.
6. Select GCUT and BCUT with [1] and [4] .
7. Adjust with [3] and [6] for the best white balance.
8. Set PICTURE and BRIGHTNESS to maximum.
9. Select GDRV and BDRV with [1] and [4] .
10. Adjust with [3] and [6] for the best white balance.
11. Reset DCOL to “1”.
12. To write into memory, press [MUTING] then [ENTER] .

SECTION 4
SAFETY RELATED ADJUSTMENTS

4-1. ⋈ R584 CONFIRMATION METHOD (HV HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components which are marked with ◪ on the schematic diagram:

DY, C508, C505, C507, C509, C511, C515, C520, C573, C574, C575, D572, D573, D574, IC301, IC521, IC602, L591, L501, R582, R583, R585, R578, R586, R625, R626, T504

Preparation Before Confirmation

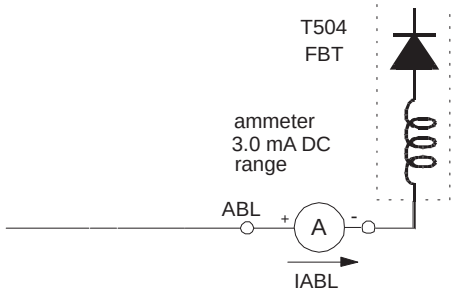
1. Using a Variac, apply AC input voltage: 120 ± 2 VAC (or 120-220 ± 2 VAC for KV-29AL42/29AL42C/29AL66/ 29AL66C/29SL42/29SL42C/29SL46/29XL42M only.)
2. Turn the POWER switch ON.
3. Input a white signal and set the PICTURE and BRIGHTNESS controls to maximum.
4. Confirm that the voltage between C574 (+) or TP503 and ground is more than 105 VDC.

Hold-down Operation Confirmation

1. Connect the current meter between Pin 11 of the FBT (T505) and the PWB land where Pin 11 would normally attach. (See Figure 1 on the next page.)
2. Input a dot signal and set PICTURE and BRIGHTNESS to minimum: IABL = 100 + 100/-95 µA.
3. Confirm the voltage of A Board TP-600 is 135 ± 3 VDC.
4. Connect the digital voltmeter and the DC power supply via diode 1SS119 to C574 (+) and ground. (See Figure 1 on the next page.)
5. Increase the DC power voltage gradually until the picture blanks out.
6. Turn DC power source off immediately.
7. Read the digital voltmeter indication (Standard: less than or equal to 141.3 VDC).
8. Input a white signal and set PICTURE and BRIGHTNESS to maximum.
9. Repeat steps 4 to 7.

Hold-down Readjustment

If the setting indicated in step 2 of Hold-down Operation Confirmation cannot be met, readjustment should be performed by altering the resistance value of R584, components marked with ⋈ .



4-2. B+ VOLTAGE CONFIRMATION AND ADJUSTMENT

Note: The following adjustments should always be performed when replacing the following components, which are marked with ◪ on the schematic diagram on schematic diagram.

IC601, IC602

1. Using a Variac, apply AC input voltage: 130 ± 2 VAC (or 120-220 ± 2 for KV-29AL42/29AL42C/29AL66/ 29AL66C/29SL42/29SL42C/29SL46/29XL42M only.)
2. Input a dot signal.
3. Set the PICTURE and BRIGHTNESS controls to minimum.
4. Set to service adjustment mode.
5. Select PADJ with [1] and [4].
6. Adjust with [6] to the 0 level.
7. Confirm that the voltage of A Board TP-600 is less than 138 VDC.
8. If step 7 is not satisfied, replace the components listed above, then repeat the above steps.
9. Adjust with [3] and [6] for: 135± 3 VDC
10. Write into the memory by pressing [MUTING] then [ENTER].

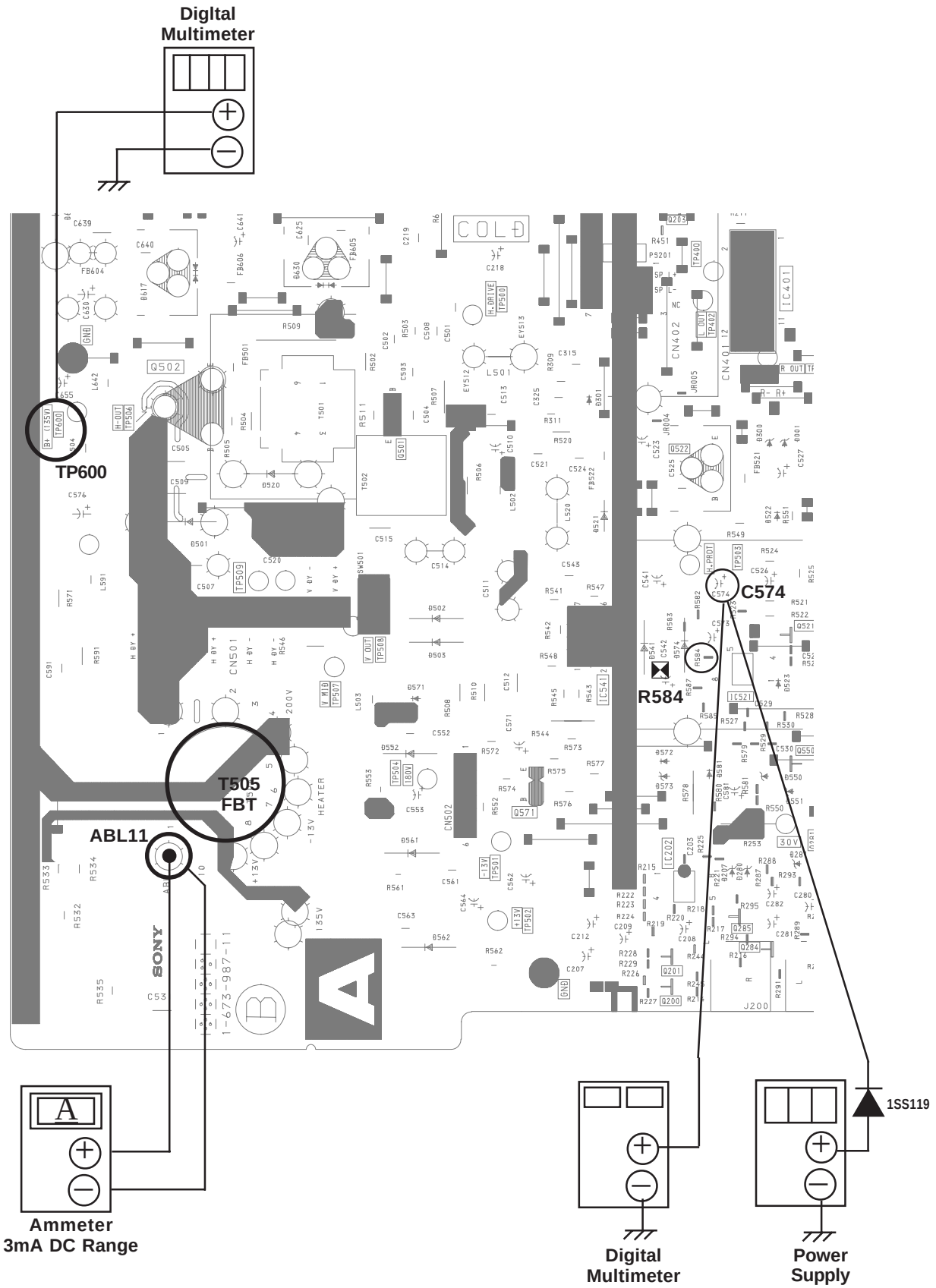

DigItal
Multimeter
TP600
T505
FBT
ABL11
C574
R584
1SS119
Ammeter
3mA DC Range
Digital
Multimeter
Power
Supply

Figure 1

SECTION 5
CIRCUIT ADJUSTMENTS

Use the Remote Commander (RM-Y168) to perform the circuit adjustments in this section.

NOTE: Test Equipment Required:

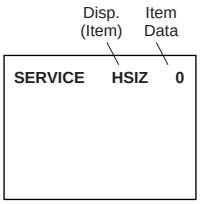
- Pattern generator
- Frequency counter
- Digital multimeter
- Audio oscillator

5-1. Setting the Service Adjustment Mode

1. Standby mode (power off).
2. [Display] ➡ Channel [5] ➡ Sound volume [+] ➡ Power ON on the Remote Commander (press each button within a second).

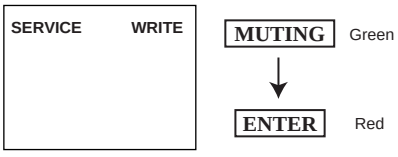
Service Adjustment Mode On

1. The CRT displays the item being adjusted.

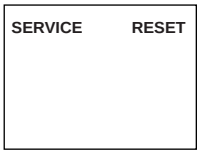


2. Press [1] or [4] on the Remote Commander to select an item.
3. Press [3] or [6] on the Remote Commander to change the data.
4. Press [MUTING] then [ENTER] to save into the memory.

Service Adjustment Mode Memory



1. Press [8] then [ENTER] on the Remote Commander to initialize.



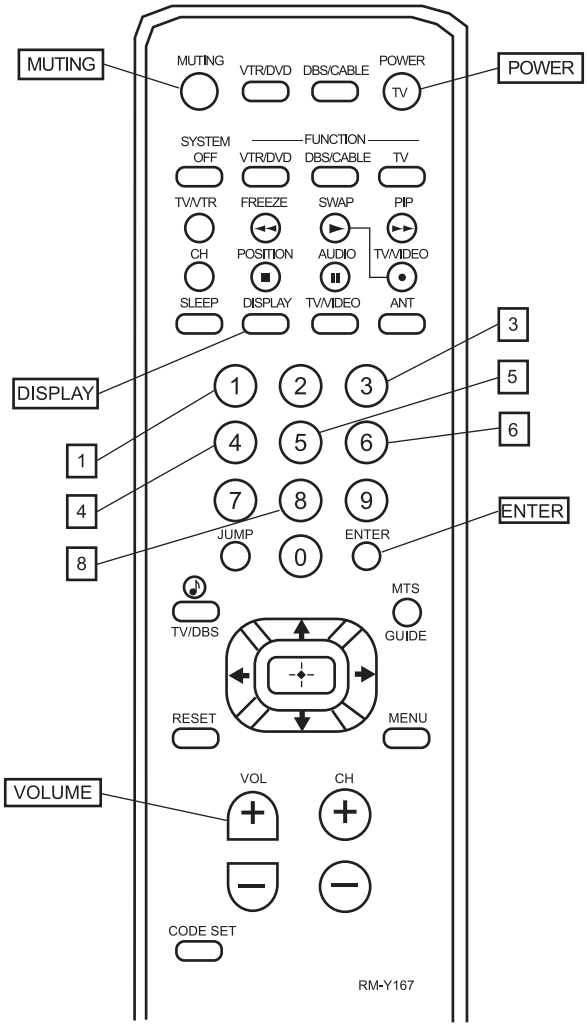
Carry out step 1 when adjusting IDs 0–4 and when replacing and adjusting IC003.

2. Turn set off then on to exit service adjustment mode.

5-2. Memory Write Confirmation Method

1. After adjustment, remove the power plug from the AC outlet, then plug it in again.
2. Turn the power switch ON and set to service mode.
3. Call the adjusted items again to confirm they were adjusted.

5-3. Adjust Buttons and Indicators



Adjustment Items

Item	Service Name	Name	Data Range	Initial Value	Average Data
1	HSIZ	A_HSIZE	0-63	31	42
2	HPOS	A_HPOS	0-63	31	22
3	VBOW	A_AFCB	0-15	7	6
4	VANG	A_AFCB	0-15	7	6
5	TRAP	A_TRAP	0-15	7	7
6	PAMP	A_PAMP	0-63	31	16
7	CPIN	A_CPIN	0-63	31	34
8	VSIZ	A_VSIZ	0-63	31	33
9	VPOS	A_VPOS	0-63	31	38
10	VLIN	A_SCOR	0-15	7	6
11	SCOR	A_SCOR	0-15	7	7
12	VZOM	A_SCROLL	0-1	0	0
13	EHT	A_TRAP	0-15	7	4
14	ASP	A_ASPECT	0-63	63	48
15	SCRL	A_SCROLL	0-63	31	31
16	HBLK	A_ASPECT	0-1	0	1
17	LBLK	A_HBLK	0-15	7	15
18	RBLK	A_HBLK	0-15	7	3
19	VUSN	A_ASPECT	0-1	0	0
20	HDW	A_PON	0-1	0	0
21	EWDC	A_HSIZE	0-1	0	0
22	LVLN	A_VLIN	0-15	0	0
23	UVLN	A_VLIN	0-15	0	0
24	RDRV	A_RDRIVE	0-63	31	14
25	GDRV	A_GDRIVE	0-63	31	10
26	BDRV	A_BDRIVE	0-63	31	8
27	RCUT	A_RCUT	0-15	7	8
28	GCUT	A_GCUT	0-15	7	4
29	BCUT	A_GCUT	0-15	7	5
30	DCOL	A_GDRIVE	0-1	0	1
31	SHUE	A1_SUBHUE	0-31	14	9
32	SCOL	A1_SUBCOL	0-31	14	23
33	SBRT	A1_SUBBRT	0-31	14	10
34	RON	A_VIDSEL	0-1	0	1
35	GON	A_VIDSEL	0-1	0	1
36	BON	A_VIDSEL	0-1	0	1
37	AXPL	A_PON	0-1	0	0
38	AXNT	A_SHPF0	0-1	0	0
39	CBPF	A_XTAL	0-1	0	1
40	CTRP	A_XTAL	0-1	0	1
41	COFF	A_COFF	0-1	0	0
42	KOFF	A_COFF	0-1	0	0
43	SSHP	A1_SUBSHP	0-15	8	6
44	SHPF	A_SHPF0	0-1	0 / 0 *2	1
45	PREL	A_DCTRAN	0-1	0	1
46	Y-DC	A_DCTRAN	0-1	0	1
47	GAMM	A_BDRIVE	0-3	0	0
48	ABLM	A_RDRIVE	0-1	1	1
49	VTH	A_RDRIVE	0-1	0	1
50	YDEL	A_HOSC	0-15	7	7
51	NCOL	A_PIC	0-1	0	1
52	FSC	A_PIC	0-1	0	1
53	K-ID	A_KID	0-1	0	0
54	HOSC	A_HOSC	0-15	7	7
55	VSS	A_FFREQ	0-1	0	0
56	HSS	A_FFREQ	0-1	0	0
57	HMSK	A_VSIZ	0-1	0	1
58	VTMS	A_TVOFF	0-3	0	0
59	CDMD	A_FFREQ	0-3	0 / 1 *2	0
60	AFC	A_VPOS	0-3	0 / 0 *2	0
61	FIFR	A_FFREQ	0-3	0	3

	Service Name	Name	Data Range	Initial Value	Average Data
62	SBAS		0-15	7	8
63	STRE		0-15	7	9
64	SBAL	A1_SUBBAL	0-31	14	13
65	DISP	A_OSDPOS	0-127	0	11
66	PADJ	A_PADJ	0-63	3	51
67	HCHM	A6_HCHM	0-255	69	69
68	HCLM	A6_HCLM	0-255	16	16
69	HCHS		0-255	69	69
70	HCLS		0-255	16	16
71	PFRN		0-1	0	0
72	PRVS		0-1	0	0
73	PCON		0-127	32	70
74	PUCO		0-127	75	63
75	PVCO		0-127	40	63
76	PHUE		0-31	15	15
77	PKIL		0-1	0	0
78	PSEP		0-3	2	2
79	PDCO		0-3	0	0
80	PEXP		0-3	2	2
81	PBGS		0-63	14	14
82	PYDL		0-15	3	7
83	PBRT		0-31	0	25
84	PVPE		0-16	0	0
85	PUPE		0-16	0	0
86	PACS		0-1	0	1
87	PSDL		0-3	0	0
88	PMVP		0-3	0	0
89	PCGA		0-1	0	1
90	PBIT		0-1	0	0
91	PAFC		0-1	0	0
92	PACC		0-63	21	20
93	PBUR		0-1	0	0
94	PEVE		0-1	0	0
95	PINW		0-1	0	0
96	PINR		0-1	0	0
97	PREF		0-1	0	0
98	PARE		0-1	1	1
99	PAVE		0-1	0	0
100	PFRA		0-15	0	0
101	PPAL		0-255	0	0
102	PHPO		0-31	31	2
103	PVPO		0-31	21	22
104	PHTI		0-15	10	10
105	PHAJ		0-15	2	2
106	PBGY		0-15	0	0
107	PCRO		0-1	0	0
108	PPAR		0-63	2	2
109	PHPF		0-1	0	1
110	PVCH		0-1	0	0
111	PVON		0-1	0	1
112	PVLN		0-31	17	17
113	PVSB		0-255	64	64
114	PVLV		0-255	130	130
115	ID0	A_NVMID0	0-255	23	See ID map
116	ID1	A_NVMID1	0-255	3	See ID map
117	ID2	A_NVMID2	0-255	11	See ID map
118	ID3	A_NVMID3	0-255	1	See ID map
119	ID4	A_NVMID4	0-255	23	See ID map
120	ID5	A_NVMID5	0-255	0	See ID map
121	ID6	A6_NVMID6	0-255	0	See ID map
122	ID7	A6_NVMID7	0-255	64	See ID map

*2: TV/VIDEO

SERVICE ID0 25

Notes:

Item numbers 1-122 show the sequence of adjustments that may be selected while in service mode.

Data Range indicates the range of possible settings for each adjustment mode.

Initial Data indicates the standard settings for each adjustment mode.

Feature ID Map

	KV-	Destination	ID-0	ID-1	ID-2	ID-3	ID-4	ID-5	ID-6	ID-7
1	27S42	US	25	145	15	235	11	3	0	64
2	27S42	CND	89	145	15	135	11	3	0	64
3	27S46	US	25	155	15	235	11	3	1	64
4	27S66	US	25	155	79	235	11	3	7	64
5	27S66	CND	89	155	79	155	11	3	7	64
6	29AL42	E	17	147	173	203	123	3	0	64
7	29AL42C	E	17	147	173	203	123	3	0	64
8	29AL66	E	17	151	237	203	123	3	7	64
9	29AL66C	E	17	151	237	203	123	3	7	64
10	29SL42	E	17	145	143	203	123	3	0	64
11	29SL42C	E	17	145	143	203	123	3	0	64
12	29SL46	E	17	155	143	203	123	3	1	64
13	29XL42M	MX	17	145	143	203	123	3	0	64

5-4. A BOARD ADJUSTMENTS

H. Frequency (Free Run) Check

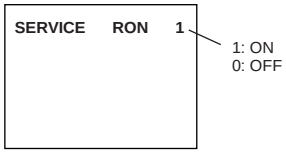
1. Input a TV mode (RF) with no signal.
2. Connect a frequency counter to base of Q501 (TP-500 H. DRIVE).
3. Check H. Frequency for 15735 ± 200 Hz.

V. Frequency (Free Run) Check

1. Select video 1 with no signal input.
2. Set the conditions for a standard setting.
3. Connect the frequency counter on the A board to TP-508 (V OUT) or CN 501 pin ⑥ (V DY+) and ground.
4. Check that V. Frequency shows 60 ± 4 Hz.

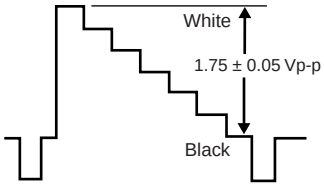
Sub Contrast Adjustment (RDRV)

1. Input a color-bar signal and set the level to 75%.
2. In Standard mode, set PICTURE to maximum, COLOR to minimum, and BRIGHTNESS to center.
3. Activate the Service Adjustment Mode.
4. Set both GON and BON items. Using [3] and [6]; set each to the following values. Leave RON set to 1.



R ON: ON (1)
G ON: OFF (0)
B ON: OFF (0)

5. Select the item DCOL item and set it to 0.
6. Connect an oscilloscope probe to CN301 pin ⑤ (RED OUT).
7. Select RDRV with [1] and [4] .
8. Adjust the value of RDRV with [3] and [6] for 1.75 ± 0.05 Vp-p.



9. Reset the item DCOL to 1.
10. Reset GON and BON values to 1.

R ON: ON (1)
G ON: ON (1)
B ON: ON (1)

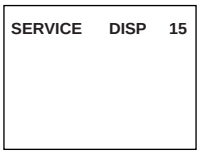
11. Reset Picture, Color, and Bright to normal values:

PICTURE: MAX
COLOR: CENTER
BRIGHT: CENTER

12. Press [MUTING] then [ENTER] to save into the memory.

Display Position Adjustment (DISP)

1. Input a color-bar signal.
2. Set to Service Adjustment Mode.
3. Select DISP with [1] and [4] .
4. Adjust values of DISP with [3] and [6] to adjust characters to the center.
5. Write to memory by pressing [MUTING] then [ENTER] .
6. Check to see if the text is displayed on the screen.

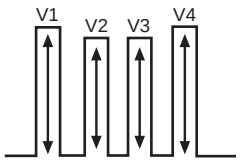


Sub Bright Adjustment (SBRT)

1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Set the PICTURE and BRIGHTNESS to minimum.
4. Select the SBRT item with [1] and [4] .
5. Adjust the values of SBRT with [3] and [6] to obtain a faintly visible crosshatch.
6. Press [MUTING] then [ENTER] to save into the memory.

Sub Hue, Sub Color Adjustment (SHUE, SCOL)

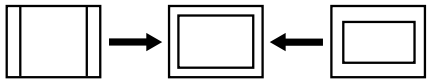
1. Input a color-bar signal.
2. Activate the Service Adjustment Mode.
3. Select the DCOL item and set the value to 0.
4. Connect an oscilloscope probe to CN301
   Pin ⑦ (BLUE OUT).
5. Select the SHUE and SCOL item with [1] and [4] .
6. While showing the SHUE item, adjust the waveform with [3] and [6] until the second and third bars show the same level (V2 = V3 ± 0.15 Vp-p).
7. While showing the SCOL item, adjust the waveform with [3] and [6] until the first and fourth bars show the same level (V1 = V4 ± 0.15 Vp-p).



8. Select the DCOL item and reset to 1.
9. Press [MUTING] then [ENTER] to save into the memory.

V. Size Adjustment (VSIZ)

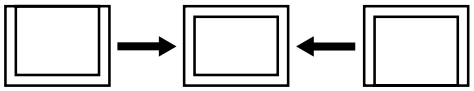
1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the VSIZ item with [1] and [4] .
4. Adjust value of VPOS with [3] and [6] for the best vertical center.
5. Press [MUTING] then [ENTER] to save into the memory.



V. Center Adjustment (VPOS)

Perform this adjustment after performing H. Frequency (Free Run) check.

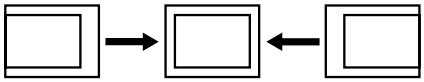
1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the VPOS item with [1] and [4] .
4. Adjust value of VPOS with [3] and [6] for the best vertical center.
5. Press [MUTING] then [ENTER] to save into the memory.



H. Center Adjustment (HPOS)

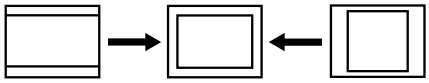
Perform this adjustment after performing H. Frequency (Free Run) check.

1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the HPOS item with [1] and [4] .
4. Adjust the value of HPOS with [3] and [6] for the best horizontal center.
5. Press [MUTING] then [ENTER] to save into the memory.



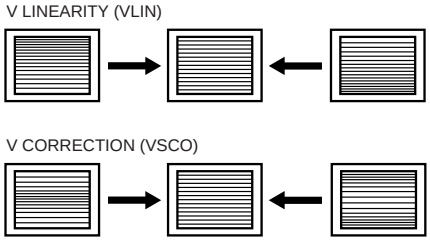
H.Size Adjustment (HSIZ)

1. Input a cross hatch signal.
2. Activate the Service Adjustment Mode.
3. Select HSIZ with [1] and [4] .
4. Adjust with [3] and [6] for the best Horizontal size.
5. Press [MUTING] then [ENTER] to save into the memory.



V. Linearity (VLIN), V Correction (VSCO)

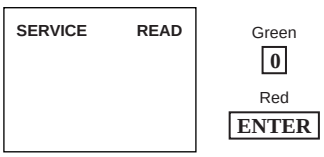
1. Input a crosshatch signal.
2. V. Correction is automatically adjusted from the circuit and should satisfy the conditions below:



Service Adjustment Mode Memory

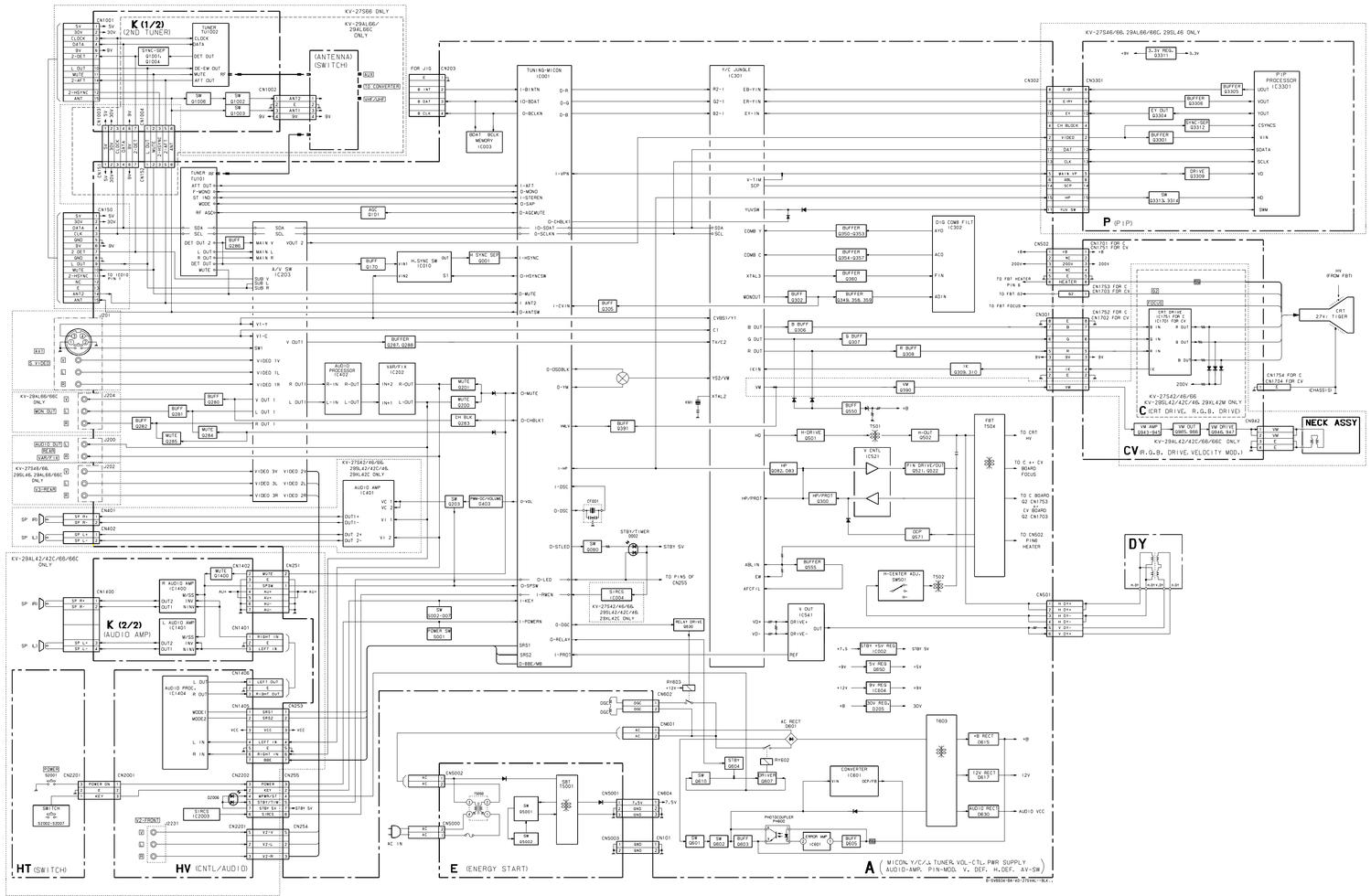
1. Change the value of the DCOL item to 1.
2. After completing all adjustments, press [0] then [ENTER] .

Read From Memory



SECTION 6
DIAGRAMS

6.1 BLOCK DIAGRAM

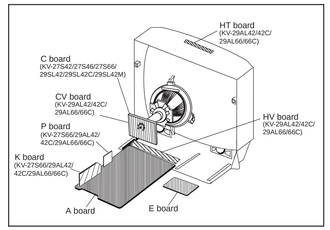


— 23 —

— 24 —

— 25 —

6-2. CIRCUIT BOARD LOCATION



6-3. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytic and tantalums.
- All electrolytics are 50V unless otherwise specified.
- Indication of resistance, which does not have one for rating electrical power, is as follows:
  Pitch: 5mm
  Rating electrical power 1/4W (CHIP: 1/10W)
- All resistors are in ohms.
  KΩ = 1000Ω MΩ = 1000KΩ
- : nonflammable resistor
- : fusible resistor
- : internal component
- : panel designation and adjustment for repair
- : earth-ground
- : earth-chassis
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- The components identified by in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by , make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by and repeat the adjustment until the specified value is achieved (refer to Safety Related Adjustments on page 17).
- When replacing parts shown in the table below, be sure to perform the related adjustments.

Part Replaced ( )	Adjustment ( )
DY, C508, C505, C507, C509, C511, C515, C520, C573, C574, C575, D572, D573, D574, IC301, IC521, IC602, L591, L501, R582, R583, R585, R578, R586, R625, R626, T504	HV HOLD-DOWN (RS84)
IC601, IC602	B+ VOLTAGE CONFIRMATION

- All voltages are in Volts
- Voltage is DC with respect to ground unless otherwise noted.
- Readings are taken with a 10MW digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerance.
- Circled numbers are waveform references.
- * : cannot be measured
- : B + Line
- : B – Line
- : Signal path

Reference Information

RESISTOR	:	RN	METAL FILM
	:	RC	SOLID
	:	FPRD	NON FLAMMABLE CARBON
	:	FUSE	NON FLAMMABLE FUSIBLE
	:	RW	NON FLAMMABLE WIREWOUND
	:	RS	NON FLAMMABLE METAL OXIDE
	:	RB	NON FLAMMABLE CEMENT
	:		ADJUSTMENT RESISTOR
COIL	:	LF-8L	MICRO INDUCTOR
CAPACITOR	:	TA	TANTALUM
	:	PS	STYROL
	:	PP	POLYPROPYLENE
	:	PT	MYLAR
	:	MPS	METALIZED POLYESTER
	:	MPP	METALIZED POLYPROPYLENE
	:	ALB	BIPOLAR
	:	ALT	HIGH TEMPERATURE
	:	ALR	HIGH RIPPLE

Note:

The components identified by shading and ⚠ mark are critical for safety. Replace only with the part number specified. The symbol (displayed on component side of the circuit board) indicates fast operating fuse. Replace only with fuse of the same rating as marked.

Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié. Le symbole indique une fusible a action rapide. Doit etre remplacee par une fusible de meme yaleur, comme marque.

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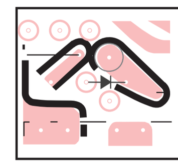
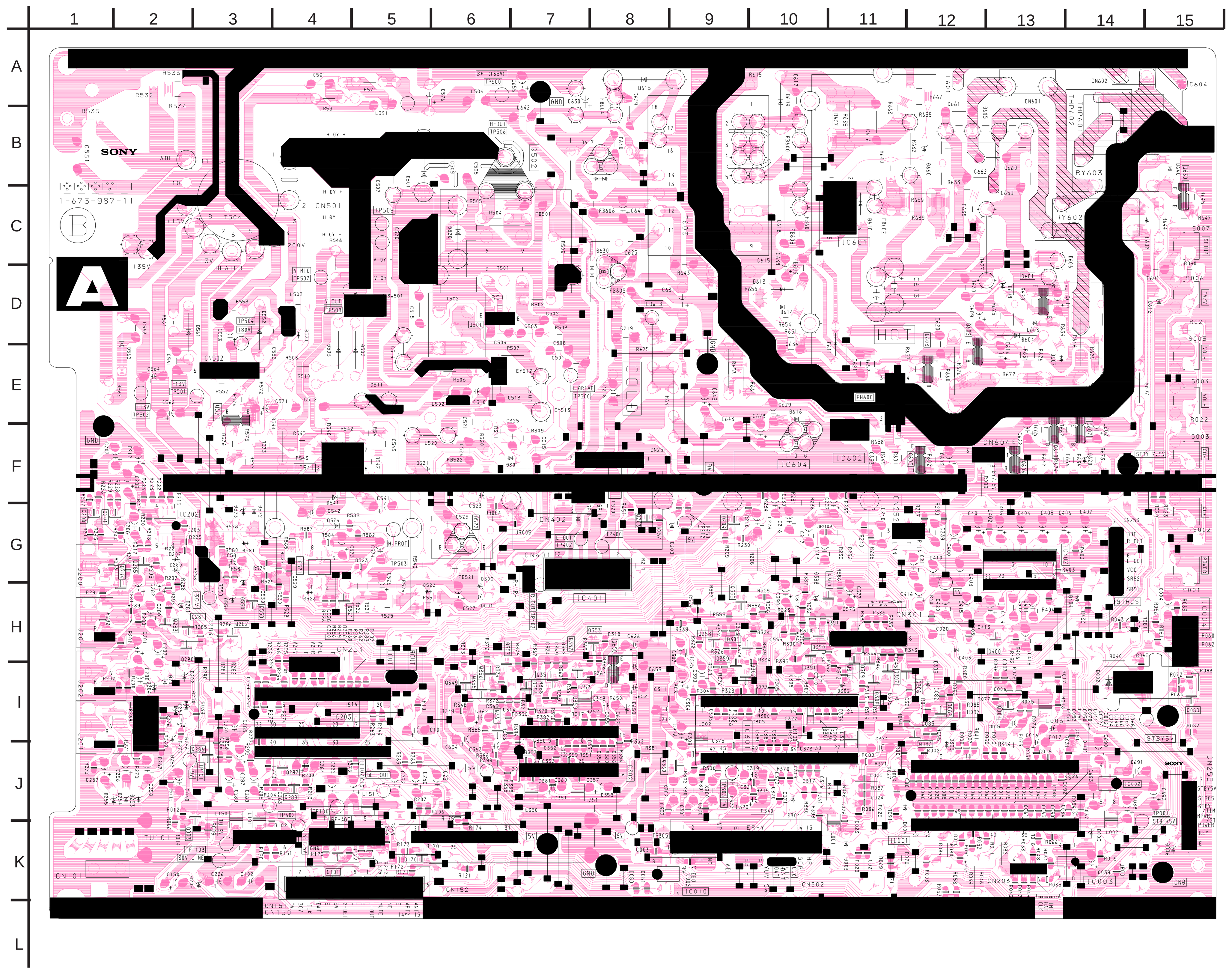
A BOARD LOCATION LIST

Ref.	Loc.
DIODE	
D001	H-6
D002	I-14
D003	K-14
D004	J-11
D005	K-14
D201	I-2
D202	I-2
D204	I-2
D205	K-3
D207	G-2
D208	G-8
D250	I-2
D251	I-2
D252	I-2
D253	J-2
D254	J-2
D255	J-2
D280	J-2
D281	H-2
D302	G-10
D303	J-12
D304	J-10
D305	I-11
D306	I-11
D388	H-10
D403	H-12
D501	B-5
D502	E-4
D503	E-4
D520	C-6
D521	F-5
D522	G-6
D523	H-4
D541	F-4
D550	H-3
D551	H-3
D552	D-3
D561	D-3
D562	E-2
D571	D-4
D572	G-3
D573	G-3
D574	G-4
D581	G-3
D602	C-14
D603	D-13
D604	D-13
D605	A-12
D606	C-13
D607	D-13
D608	A-10
D609	A-10
D610	C-11
D611	D-11
D612	D-14
D613	D-10
D614	D-10
D615	A-8
D617	B-8
D620	F-13
D630	C-8
D640	B-15
D650	D-10
IC	
IC001	J-13
IC002	J-14
IC003	K-14
IC004	H-15
IC010	K-9
IC202	G-2
IC203	I-4
IC301	I-10
IC302	J-7
IC401	G-8
IC402	G-13
IC521	G-4
IC541	F-4
IC601	C-10
IC602	F-10
IC604	F-10
TRANSISTOR	
Q001	I-12
Q080	I-15
Q082	I-12
Q083	I-12
Q101	K-4
Q170	K-5
Q200	G-1
Q201	G-1
Q203	G-8
Q280	H-3
Q281	H-3
Q282	H-3
Q283	H-2
Q284	G-2
Q285	G-2
Q286	J-3
Q287	J-4
Q288	J-4
Q300	H-10
Q302	J-9
Q305	H-9
Q306	I-11
Q307	I-11
Q308	I-11
Q309	I-11
Q310	I-11
Q349	H-6
Q350	H-8
Q351	I-7
Q352	I-7
Q353	H-8
Q354	I-7
Q355	I-6
Q356	H-6
Q357	H-6
Q358	H-9
Q359	H-9
Q360	J-8
Q361	I-6
Q390	H-10
Q391	H-10
Q501	D-6
Q502	B-6
Q521	H-4
Q522	G-6
Q550	H-3
Q555	G-9
Q571	E-3
Q601	D-13
Q602	E-12
Q603	E-13
Q604	F-13
Q605	F-12
Q607	F-13
Q610	F-13
Q630	B-15
Q650	H-8
CRYSTAL	
X001	J-13
X301	J-9

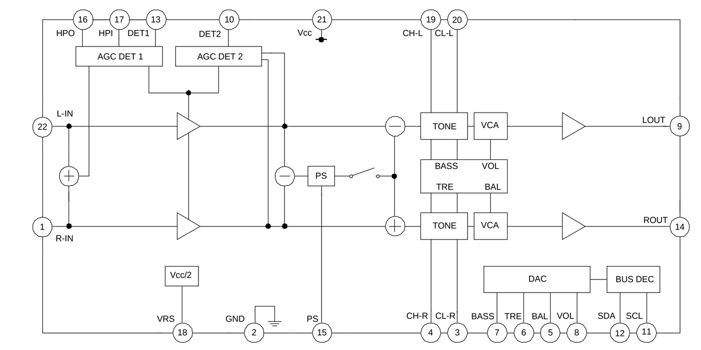


NOTE:
Portions of the circuit marked as shown are high voltage areas. Use care to prevent electric shocks during inspection or repair.

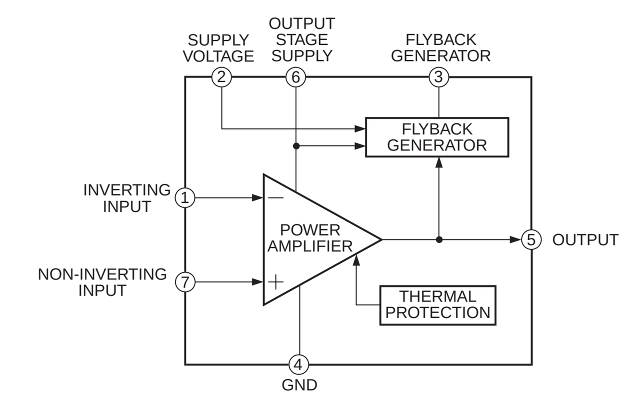
A [TUNING CONTROL, Y/C/J, DEFLECTION, TUNER/IF, AUDIO, MTS]



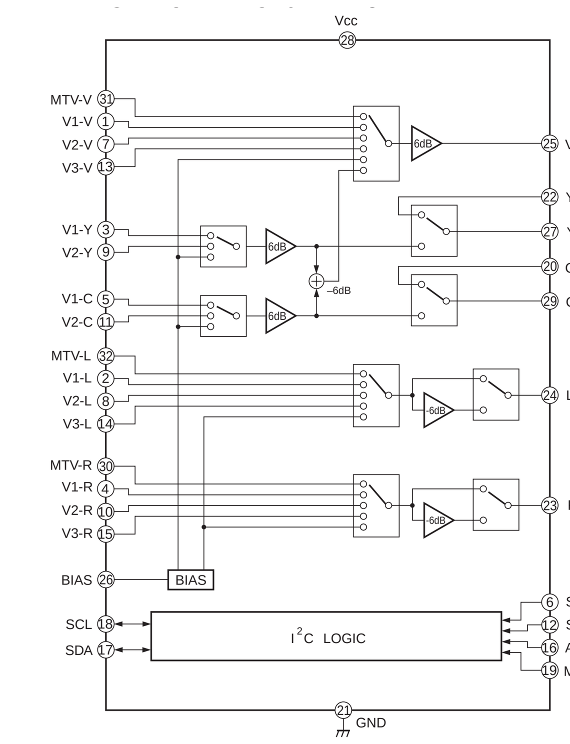
A BOARD: IC402 CXA2021S



A BOARD: IC541 TDA8172

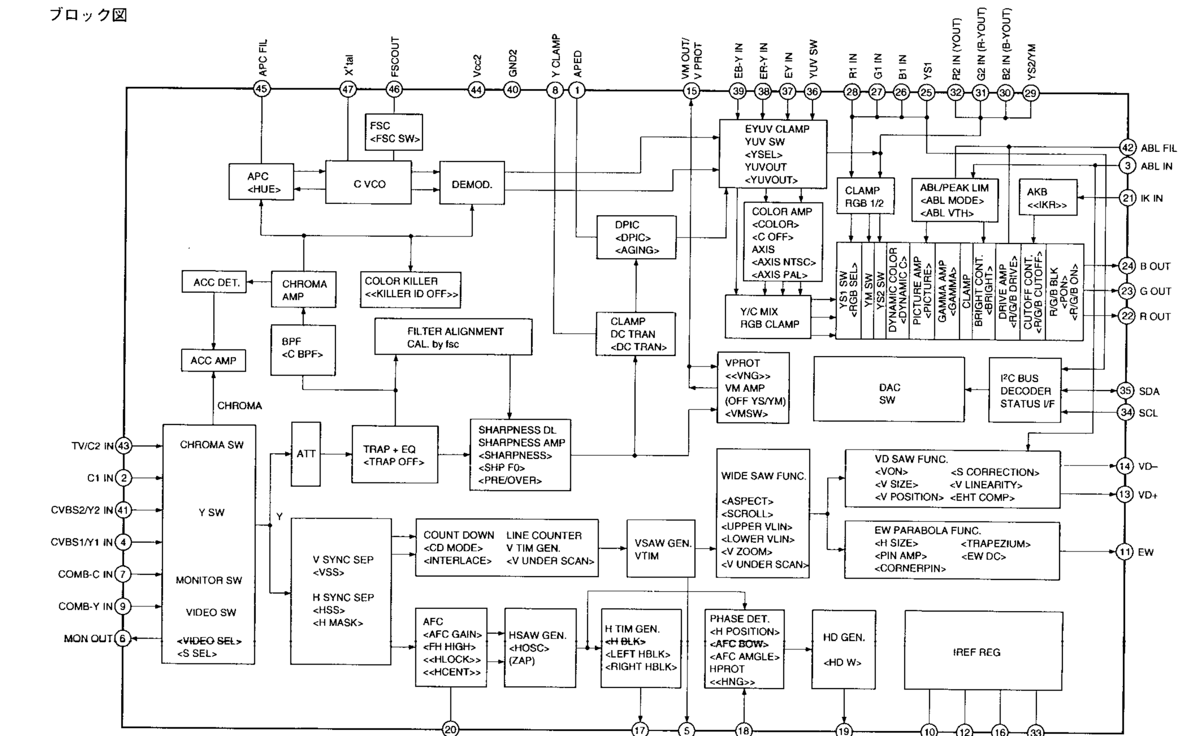


A BOARD: IC203 MM1311AD



A BOARD: IC301 CXA2133S

ブロック図



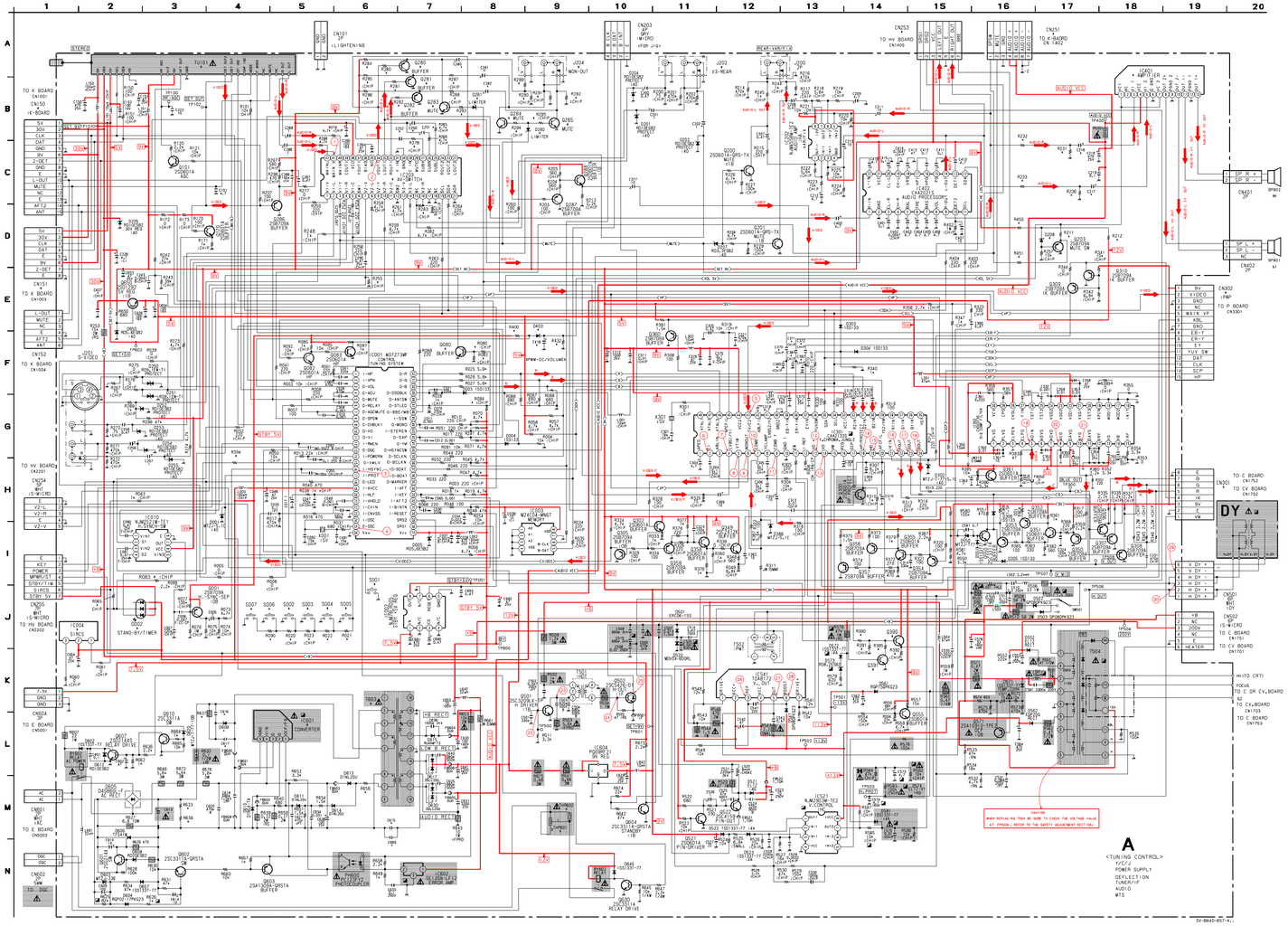
A BOARD (*) MARK VARIANT LIST

REF NO.	LOC.	KV-27S42	KV-29XL42M KV-29SL42C KV-29SL42	KV-27S46	KV-29SL46	KV-27S66	KV-29AL42 KV-29AL42C	KV-29AL66 KV-29AL66C
C216	C17	0.47MF	0.47MF	0.47MF	0.47MF	0.47MF	#	#
C217	C17	0.47MF	0.47MF	0.47MF	0.47MF	0.47MF	#	#
C250	B7	#	#	#	#	1	#	1
C251	B7	#	#	#	#	1	#	1
C252	B6	#	#	#	#	0.47MF	#	0.47MF
C280	A7	#	#	#	#	#	#	470 25V
C281	A8	#	#	#	#	#	#	0.47MF
C282	B8	#	#	#	#	#	#	0.47MF
C370	F13	#	#	0.01MF	0.01MF	0.01MF	#	0.01MF
C371	F13	#	#	0.01MF	0.01MF	0.01MF	#	0.01MF
C372	F13	#	#	0.01MF	0.01MF	0.01MF	#	0.01MF
C380	F13	0.01MF	0.01MF	#	#	#	0.01MF	#
C381	F13	0.01MF	0.01MF	#	#	#	0.01MF	#
C382	F13	0.01MF	0.01MF	#	#	#	0.01MF	#
C418	F9	10MF	10MF	10MF	10MF	10MF	#	#
C613	M3	680MF 250V	560MF 400V	680MF 250V	560MF 400V	680MF 250V	560MF 400V	560 400V
C615	M6	0.0022MF	0.0047MF	0.0022MF	0.0047MF	0.0022MF	0.0047MF	0.0047MF
C616	L4	#	0.022 400V	#	0.022 400V	#	0.022 400V	0.022 400V
C617	L4	#	220p	#	220p	#	220p	220p
C627	E2	#	#	#	#	0.1MF	#	0.1MF
C699	M6	#	0.0047MF	#	0.0047MF	#	0.0047MF	0.0047MF
CN150	B1	#	#	#	#	15P	#	#
CN151	E1	#	#	#	#	#	#	8P
CN152	F13	#	#	#	#	#	#	6P
CN251	A16	#	#	#	#	#	7P	7P
CN253	A15	#	#	#	#	#	7P	7P
CN301	H20	5P	5P	5P	5P	5P	8P	8P
CN302	E20	#	#	15P	15P	15P	#	15P
D002	J2	LNK0120022G	LNK0120022G	LNK0120022G	LNK0120022G	LNK0120022G	#	#
D208	D17	MTZJ-T-77-10B	MTZJ-T-77-10B	MTZJ-T-77-10B	MTZJ-T-77-10B	MTZJ-T-77-10B	MTZJ-T-77-2.2A	MTZJ-T-77-2.2A
D280	B8	#	#	#	#	#	#	MTZJ-T-77-3.3
D281	B8	#	#	#	#	#	#	MTZJ-T-77-3.3
D403	E9	1SS133T-77	1SS133T-77	1SS133T-77	1SS133T-77	1SS133T-77	#	#
D609	L4	#	RU-1P	#	RU-1P	#	RU-1P	RU-1P
IC004	J1	IC SBX1981-51	IC SBX1981-51	IC SBX1981-51	IC SBX1981-51	IC SBX1981-51	#	#
IC203	C6	MM1311AD	MM1311AD	MM1313AD	MM1313AD	MM1313AD	MM1311AD	MM1313AD
IC401	B18	TDA7057AQ	TDA7057AQ	TDA7057AQ	TDA7057AQ	TDA7057AQ	#	#
IC601	L5	IC SRTF6626	IC SRTF6656	IC SRTF6626	IC SRTF6656	IC SRTF6626	IC SRTF6656	IC SRTF6656
J202	A11	#	#	3P	3P	3P	#	3P
J204	A9	#	#	#	#	#	#	3P
PS201	F7	2A/90V	2A/90V	2A/90V	2A/90V	2A/90V	#	#
Q080	A7	#	#	#	#	#	#	2SD601A
Q280	B7	#	#	#	#	#	#	2SB709A
Q281	B7	#	#	#	#	#	#	2SB709A
Q282	B7	#	#	#	#	#	#	2SB709A
Q283	B8	#	#	#	#	#	#	2SD601A
Q284	B9	#	#	#	#	#	#	2SD601A
Q285	J14	#	#	#	#	#	#	2SD601A
Q390	K14	#	#	#	#	#	2SD601A	2SD601A
Q391	B17	#	#	#	#	#	2SD601A	2SD601A
R020	J5	6.8K	6.8K	6.8K	6.8K	6.8K	#	#
R021	J6	680	680	680	680	680	#	#
R022	J5	820	820	820	820	820	#	#
R023	J5	2.2K	2.2K	2.2K	2.2K	2.2K	#	#

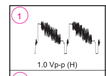
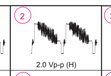
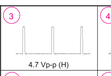
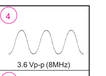
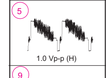
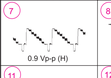
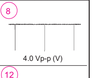
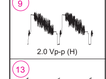
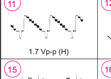
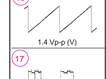
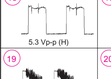
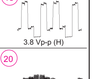
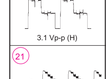
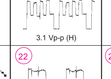
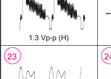
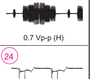
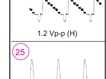
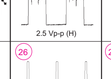
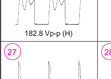
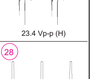
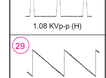
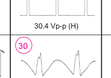
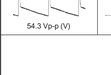
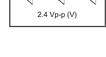
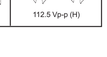
REF NO.	LOC.	KV-27S42	KV-29XL42M KV-29SL42C KV-29SL42	KV-29SL46	KV-27S46	KV-27S66	KV-29AL42 KV-29AL42C	KV-29AL66 KV-29AL66C
R065	J2	0	0	0	0	0	#	#
R080	F8	#	#	#	#	#	#	22K
R082	F8	#	#	#	#	#	#	10K
R083	I3	#	#	#	#	#	#	470
R084	G8	#	#	#	#	#	#	10K
R090	J4	10K	10K	10K	10K	10K	#	#
R211	D17	100 1/6W	100 1/6W	100 1/6W	100 1/6W	100 1/6W	#	#
R212	D18	4.7 1/4W	4.7 1/4W	4.7 1/4W	4.7 1/4W	4.7 1/4W	#	#
R231	C17	2.2K	2.2K	2.2K	2.2K	2.2K	#	#
R232	C16	10K	10K	10K	10K	10K	#	#
R233	C16	10K	10K	10K	10K	10K	#	#
R236	C17	2.2K	2.2K	2.2K	2.2K	2.2K	#	#
R255	E6	#	#	#	#	#	75	75
R278	C7	#	#	#	#	0	#	0
R280	A6	#	#	#	#	#	#	100
R281	B6	#	#	#	#	#	#	100
R282	B6	#	#	#	#	#	#	100
R283	E7	#	#	0	0	0	#	0
R284	A6	#	#	#	#	#	#	220
R285	A6	#	#	#	#	#	#	4.7K
R286	B6	#	#	#	#	#	#	4.7K
R287	B7	#	#	#	#	#	#	4.7K
R288	B7	#	#	#	#	#	#	4.7K
R289	B8	#	#	#	#	#	#	68
R290	B8	#	#	#	#	#	#	470K
R291	B9	#	#	#	#	#	#	470K
R292	B9	#	#	#	#	#	#	470K
R293	B7	#	#	#	#	#	#	6.8K
R294	B8	#	#	#	#	#	#	6.8K
R295	B9	#	#	#	#	#	#	6.8K
R390	J14	#	#	#	#	#	1K	1K
R391	J14	#	#	#	#	#	10K	10K
R392	K14	#	#	#	#	#	1K	1K
R394	G4	#	#	#	#	#	220	220
R395	J14	#	#	#	#	#	1K	1K
R400	E8	22K	22K	22K	22K	22K	#	#
R407	D7	0	0	#	#	#	0	#
R432	F9	8.2K	8.2K	8.2K	8.2K	8.2K	#	#
R450	D16	#	#	#	#	#	0	0
R451	D16	#	#	#	#	#	0	0
R633	M3	390K	270K	390K	270K	390K	270K	270K
R637	L3	#	100K	#	100K	#	100K	100K
R638	M3	JW(5MM)	270K	JW(5MM)	270K	JW(5MM)	270K	270K
R656	M6	33	56	33	56	33	56	56
S001	J6	1-692-431-21	1-692-431-21	1-692-431-21	1-692-431-21	1-692-431-21	#	#
S002	J5	1-692-431-21	1-692-431-21	1-692-431-21	1-692-431-21	1-692-431-21	#	#
S003	J5	1-692-431-21	1-692-431-21	1-692-431-21	1-692-431-21	1-692-431-21	#	#
S004	J5	1-692-431-21	1-692-431-21	1-692-431-21	1-692-431-21	1-692-431-21	#	#
S005	J6	1-692-431-21	1-692-431-21	1-692-431-21	1-692-431-21	1-692-431-21	#	#
S006	J4	1-692-431-21	1-692-431-21	1-692-431-21	1-692-431-21	1-692-431-21	#	#
S007	J4	1-692-431-21	1-692-431-21	1-692-431-21	1-692-431-21	1-692-431-21	#	#
T603	E6	1-433-806-11	1-433-807-11	1-433-806-11	1-433-807-11	1-433-806-11	1-433-807-11	1-433-807-11
THP601	M9	#	1-803-540-11	#	1-803-540-11	#	1-803-540-11	1-803-540-11
THP602	M9	1-809-539-11	#	1-809-539-11	#	1-809-539-11	#	#

#: NOT MOUNTED

A BOARD SCHEMATIC DIAGRAM


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
A B C D E F G H I J K L M N
TU101
IC001 M37273M8-XXXFP TUNING SYSTEM
IC002 STK392-130 AUDIO POWER AMPLIFIER
IC003 M62429FP DUAL 8BIT ELECTRONIC VOLUME
IC004 PQ05RD21 5V REGULATOR
IC201 STR-S6707 SWITCHING REGULATOR
IC202 STR-S6707 SWITCHING REGULATOR
IC301 M37273M8-XXXFP DEFLECTION
IC401 M52747SP VERTICAL OUTPUT
IC501 M52747SP VERTICAL OUTPUT
IC502 TDA4605-3 H&V DRIVE
IC521 TDA8172 VERTICAL OUTPUT
CN101 2P +L LIGHTENING
CN203 6P SPY MTRO
CN253 TO HV BOARD CN1405
CN251 TO K BOARD CN 1902
CN001 TO K BOARD CN1001
CN150 TO K BOARD
CN151 TO K BOARD CN1003
CN152 TO K BOARD CN1004
CN204 TO HV BOARD CN2201
CN205 TO HV BOARD CN2202
CN206 TO E BOARD CN5002
CN604 TO E BOARD CN5001
CN602 TO P BOARD CN3301
CN752 TO C BOARD CN752
CN753 TO CV BOARD CN703
CN701 TO C BOARD CN1751
CN702 TO CV BOARD CN1701
CN651 2P
CN652 2P
SPW01
SPW02
DY
A
<TUNING CONTROL>
Y/C/J
POWER SUPPLY
DEFLECTION
TUNER/IF
AUDIO
MTS
CAUTION
WHEN REPLACING T504 BE SURE TO CHECK THE VOLTAGE VALUE AT TP5500 , REFER TO THE SAFETY ADJUSTMENT SECTION.
SV-9940-857-A

A BOARD WAVEFORMS

1  1.0 Vp-p (H)	2  2.0 Vp-p (H)	3  4.7 Vp-p (H)	4  3.6 Vp-p (8MHz)
5  1.0 Vp-p (H)	6 0.7 Vp-p (H)	7  0.9 Vp-p (H)	8  4.0 Vp-p (V)
9  2.0 Vp-p (H)	10 0.9 Vp-p (H)	11  1.7 Vp-p (H)	12 1.4 Vp-p (V)
13  1.4 Vp-p (V)	14 5.5 Vp-p (H)	15  5.3 Vp-p (H)	16  3.8 Vp-p (H)
17  3.1 Vp-p (H)	18  3.1 Vp-p (H)	19  1.3 Vp-p (H)	20  0.7 Vp-p (H)
21  1.2 Vp-p (H)	22  2.5 Vp-p (H)	23  182.8 Vp-p (H)	24  23.4 Vp-p (H)
25  1.08 KVp-p (H)	26  30.4 Vp-p (H)	27  54.3 Vp-p (V)	28 31.1 Vp-p (V)
29  2.4 Vp-p (V)	30  112.5 Vp-p (H)		

A BOARD IC VOLTAGE LIST

IC001	
pin	volt
1	0.6
2	4.8
3	0.0
4	0.0
5	4.8
6	0.0
7	0.0
8	0.2
9	0.0
10	NC
11	NC
12	3.3
13	0.0
14	4.9
15	0.0
16	0.0
17	0.3
18	4.9
19	4.9
20	1.8
21	0.0
22	2.2
23	GND
24	2.3
25	2.3
26	GND
27	4.9
28	0.0
29	0.0
30	4.9
31	4.9
32	2.8
33	4.9
34	2.5
35	NC
36	4.9
37	4.9
38	4.9
39	4.9
40	0.5
41	0.0
42	0.0
43	4.9
44	0.1
45	NC
46	4.9
47	0.0
48	0.0
49	0.0
50	0.0
51	0.0
52	0.0

IC002	
pin	volt
1	7.1
2	GND
3	5.4
4	GND
5	GND
6	4.9
7	GND
8	4.9

IC003	
pin	volt
1	GND
2	GND
3	GND
4	GND
5	4.9
6	4.9
7	4.9
8	4.9

IC004	
pin	volt
1	2.9
2	4.9
3	GND

IC010	
pin	volt
1	0.0
2	0.5
3	0.0
4	GND
5	NC
6	9.0
7	0.0
8	GND

IC200	
pin	volt
1	7.6
2	7.6
3	7.6
4	GND
5	7.6
6	7.6
7	7.6
8	15.3

IC203	
pin	volt
1	4.9
2	4.2
3	4.9
4	4.2
5	4.9
6	6.1
7	4.9

8	4.2
9	5.1
10	4.2
11	NC
12	GND
13	4.9
14	4.3
15	4.3
16	4.3
17	GND
18	GND
19	4.9
20	4.9
21	GND
22	NC
23	GND
24	NC
25	4.2
26	4.2
27	5.0
28	NC
29	NC
30	GND
31	NC
32	4.2
33	4.2
34	5.0
35	0.0
36	4.3
37	NC
38	9.0
39	NC
40	4.2
41	5.1
42	4.2

IC301	
pin	volt
1	3.4
2	5.1
3	4.3
4	5.1
5	4.8
6	4.4
7	2.2
8	4.9
9	5.1
10	GND
11	4.3
12	2.4
13	3.5
14	3.5
15	5.7
16	7.6
17	0.7

18	3.5
19	3.1
20	2.5
21	1.6
22	1.8
23	1.8
24	1.8
25	NC
26	NC
27	NC
28	NC
29	0.0
30	4.6
31	4.6
32	4.6
33	8.9
34	4.9
35	4.9
36	0.0
37	4.4
38	5.2
39	5.2
40	GND
41	NC
42	8.9
43	5.2
44	9.0
45	4.7
46	4.7
47	1.9
48	NC

IC302	
1	5.1
2	0.0
3	0.0
4	NC
5	1.2
6	0.0
7	5.1
8	1.1
9	5.1
10	0.7
11	0.0
12	2.0
13	2.8
14	1.0
15	2.2
16	0.0
17	0.0
18	0
19	0
20	NC
21	0
22	5.1

23	5.1
24	0.0
25	1.1
26	0.0
27	2.5
28	5.1
29	2.3
30	2.3

IC401	
pin	volt
1	0.7
2	NC
3	2.3
4	14.3
5	2.3
6	GND
7	0.3
8	6.9
9	GND
10	6.9
11	6.9
12	GND
13	6.9

IC402	
pin	volt
1	4.4
2	GND
3	4.4
4	4.4
5	4.4
6	4.4
7	4.4
8	4.4
9	4.4
10	1.5
11	4.9
12	4.9
13	5.6
14	4.4
15	4.4
16	4.4
17	4.4
18	4.4
19	4.4
20	4.4
21	9.0
22	4.4

IC521	
pin	volt
1	0.1
2	3.8
3	2.5
4	GND
5	9.1

6	10.2
7	0.1
8	13.8

IC541	
pin	volt
1	1.6
2	13.8
3	-13.4
4	-15.3
5	0.0
6	14.6
7	1.6

IC601	
pin	volt
1	1.8
2	0.2
3	151.7
4	17.3
5	GND

IC602	
pin	volt
1	135
2	121
3	GND

IC604	
pin	volt
IN	11.7
OUT	9.0
GND	GND

All voltages are in V

A BOARD IC VOLTAGE LIST

	B	C	E
Q001	4.3	4.8	4.9
Q080	0.0	3.9	GND
Q082	0.2	4.6	GND
Q083	0.0	0.6	GND
Q101	0.0	4.6	GND
Q170	4.4	9.0	0.0
Q200	0.0	0.0	GND
Q201	0.6	0.0	GND
Q203	2.4	GND	0.7
Q280	5.2	GND	5.9
Q281	4.1	GND	4.7
Q282	4.1	GND	4.7
Q283	0.0	5.9	GND
Q284	0.6	0.0	GND
Q285	0.6	0.0	GND
Q286	4.4	GND	4.9
Q287	5.0	GND	5.7
Q288	7.3	9.0	6.7
Q300	0.2	3.5	GND
Q302	4.4	9.0	3.8
Q305	3.8	GND	4.4
Q306	1.7	GND	2.4
Q307	1.8	GND	2.4
Q308	1.8	GND	2.4
Q309	3.6	1.6	3.8
Q310	3.6	GND	3.8
Q349	5.2	9.0	4.6
Q350	0.7	GND	1.4

	B	C	E
Q351	1.4	8.3	0.8
Q352	8.3	1.2	8.9
Q353	1.2	GND	1.8
Q354	1.1	GND	1.7
Q355	1.7	8.2	1.1
Q356	8.2	1.5	8.8
Q357	1.5	GND	2.2
Q358	5.9	9.0	5.2
Q359	3.8	GND	4.4
Q360	4.7	GND	5.3
Q361	1.3	5.1	1.2
Q390	5.0	9.0	4.4
Q391	0.0	5.0	GND
Q501	-0.1	97.3	GND
Q521	0.1	4.2	GND
Q522	0.4	11.2	GND
Q550	0.7	0.1	GND
Q555	2.1	4.0	1.5
Q571	134.0	0.8	134.6
Q601	-0.1	0.2	0.0
Q602	0.0	17.0	0.0
Q603	17.0	2.9	17.3
Q604	0.1	3.9	GND
Q607	0.7	0.1	GND
Q610	0.0	0.7	GND
Q630	0.0	135.0	GND
Q650	5.7	9.0	5.1

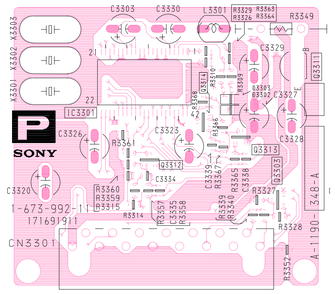
All voltages are in V

857.3 A Board Schem.p65 1
3/26/99, 2:30 PM

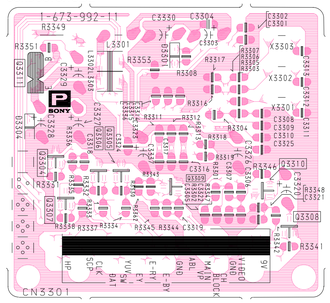
P [P in P]

(KV-27S46/29AL42/29AL42C/29AL66/29AL66C ONLY)

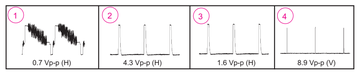
COMPONENT SIDE



CONDUCTOR SIDE



P BOARD WAVEFORMS

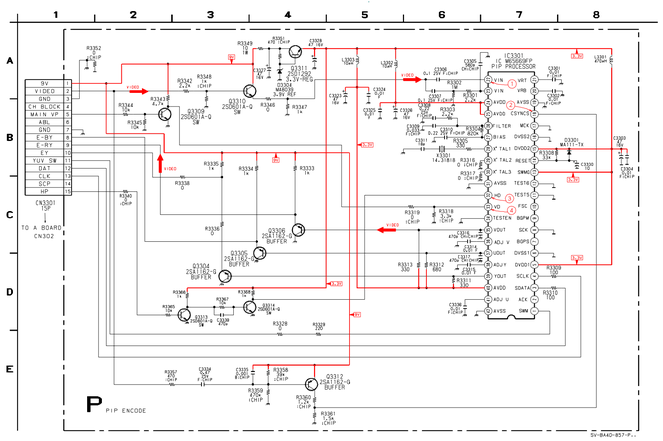


P BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q3304	2.3	GND	2.9
Q3305	3.0	GND	3.7
Q3306	3.0	GND	3.7
Q3309	0.7	0.0	GND
Q3310	0.3	8.9	1.8
Q3311	3.9	7.4	3.3
Q3312	8.2	0.1	8.9
Q3313	0.2	3.3	GND
Q3314	3.1	0.6	GND

All voltages are in V

P BOARD SCHEMATIC DIAGRAM



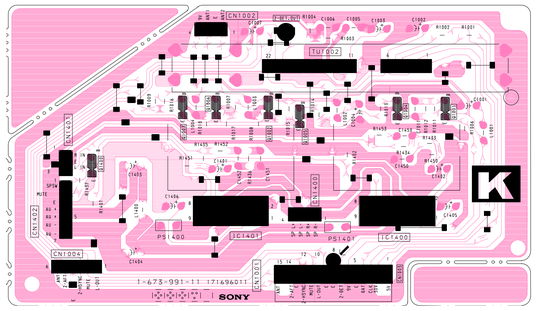
P BOARD IC VOLTAGE LIST

IC3301	
pin	volt
1	0.0
2	0.0
3	4.9
4	4.9
5	3.3
6	NC
7	0.0
8	0.0
9	NC
10	NC
11	0.0
12	0.0
13	3.3
14	3.3
15	3.3
16	0.0
17	0.0
18	0.4
19	GND
20	0.5
21	1.5
22	0.8
23	0.7
24	3.3
25	3.3
26	1.5
27	1.5
28	2.0
29	0.4
30	0.5
31	GND
32	0.6
33	0.0
34	GND
35	3.0
36	1.2
37	2.9
38	1.3
39	2.3
40	3.3
41	1.2
42	GND

All voltages are in V

K [SECOND TUNER, AUDIO AMP]

(KV-27S66/29AL42/29AL42C/29AL66/29AL66C ONLY)



K BOARD (*) MARK VARIANT LIST

REF. NO.	KV-27S66	KV29AL42 KV-29AL42C	KV-29AL66 KV-29AL66C
C1401	#	0.47MF	0.22MF
C1402	#	0.47MF	0.22MF
C1403	#	2200MF	2200MF
C1404	#	2200MF	2200MF
C1452	#	0.0033MF	0.0033MF
C1453	#	0.0033MF	0.0033MF
CN1001	15P	#	#
CN1003	#	8P	8P
CN1004	#	#	6P
CN1402	#	7P	7P
IC1400	#	TDA1519	TDA1519
IC1401	#	TDA1519	TDA1519
R1452	#	10K	8.2K
R1453	#	10K	8.2K
TU1002	FSS BTF-FA401	#	FSS BTF-FA401

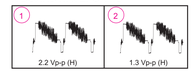
#: NOT MOUNTED

K BOARD IC VOLTAGE LIST

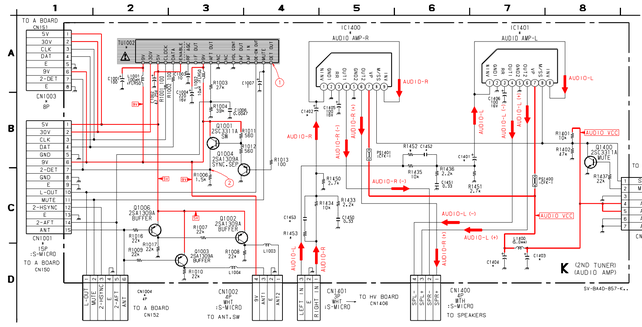
IC1400	
pin	volt
1	0.0
2	GND
3	0.0
4	0.0
5	GND
6	0.0
7	16.9
8	0.0
9	0.0
IC1401	
pin	volt
1	0.0
2	GND
3	0.0
4	0.0
5	GND
6	0.0
7	16.9
8	0.0
9	0.0

All voltages are in V

K BOARD WAVEFORMS



K BOARD SCHEMATIC DIAGRAM



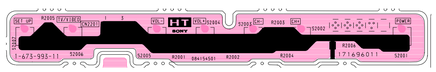
K BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q1001	7.0	8.9	6.4
Q1002	5.1	0.0	5.1
Q1003	4.4	5.0	5.1
Q1004	4.5	GND	5.2
Q1006	4.5	5.1	5.1
Q1400	0.7	0.0	GND

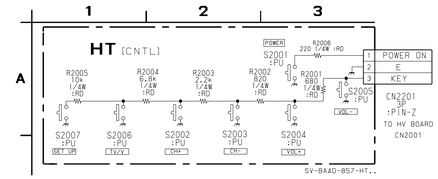
All voltages are in V

HT [CNTL]

(KV-29AL42/29AL42C/29AL66/29AL66C ONLY)

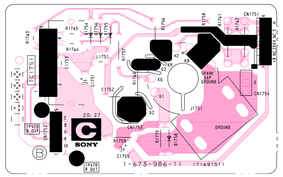


HT BOARD SCHEMATIC DIAGRAM

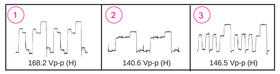


C [RGB DRIVE, CRT DRIVE]

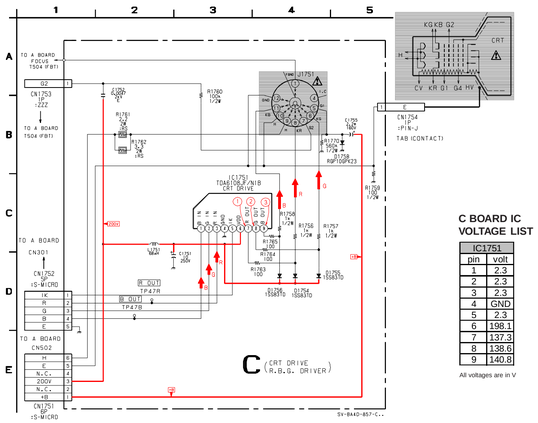
(KV-27S42/27S46/27S66/29SL42/29SL42C/29XL42M ONLY)



C BOARD WAVEFORMS



C BOARD SCHEMATIC DIAGRAM



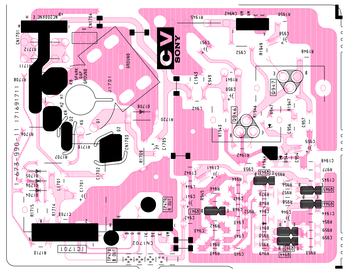
C BOARD IC VOLTAGE LIST

IC1751	
pin	volt
1	2.3
2	2.3
3	2.3
4	GND
5	2.3
6	198.1
7	137.3
8	138.6
9	140.8

All voltages are in V

CV [RGB DRIVE,VELOCITY MOD.]

(KV-29AL42/29AL42C/29AL66/29AL66C ONLY)



CV BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q943	4.5	8.9	3.7
Q944	2.1	8.9	1.5
Q945	2.1	6.0	1.5
Q946	133.2	67.1	134.7
Q947	0.9	67.1	0.3
Q965	6.5	8.9	6.2
Q966	6.0	0.0	6.2

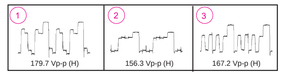
All voltages are in V

CV BOARD IC VOLTAGE LIST

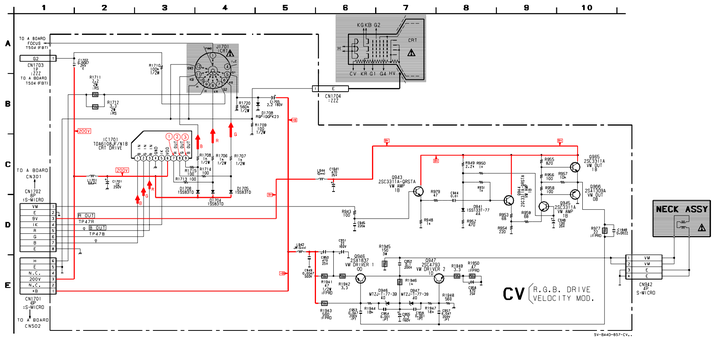
IC1701	
pin	volt
1	2.3
2	2.3
3	2.3
4	GND
5	3.7
6	203.6
7	129.0
8	126.0
9	127.0

All voltages are in V

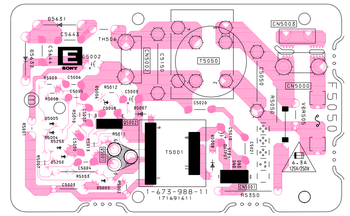
CV BOARD WAVEFORMS



CV BOARD SCHEMATIC DIAGRAM



E [ENERGY START]



E BOARD (*) MARK VARIANT LIST

REF. NO.	KV-27S42 KV-27S46 KV-27S66	KV-29AL66 KV-29AL66C KV-29AL42 KV-29AL42C KV-29SL42 KV-29SL42C KV-29XL42M KV-29SL46
C5020	0.002ZMF	0.0047MF
C5021	#	0.0047MF
C5150	0.47MF	#
F5050	6.3A/125V	6.3A/250V
R5350	4.7M	8.2M
T5050	1-431-838-11	1-426-717-11
VDR505	1-803-585-11	1-803-587-11

#: NOT MOUNTED

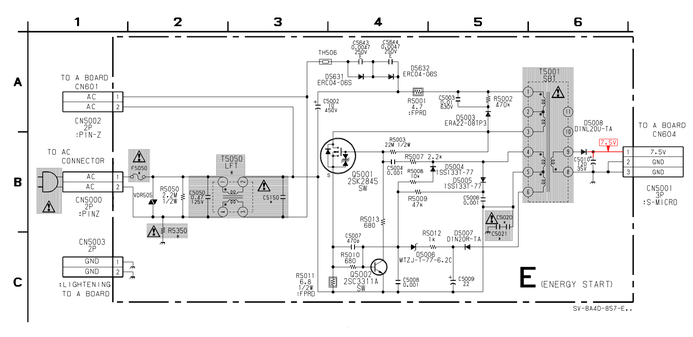
E BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q5002	0.4	1.5	0.0

	G	S	D
Q5001	1.5	0.1	157.6

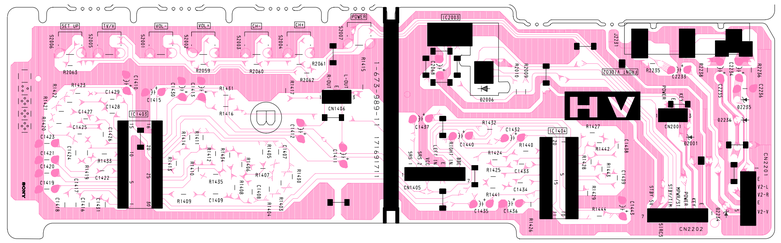
All voltages are in V

E BOARD SCHEMATIC DIAGRAM

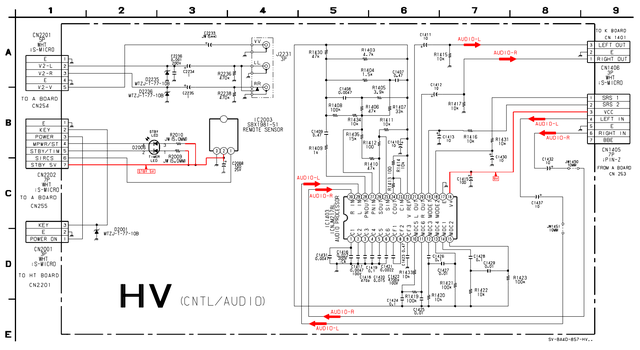


HV [CNTL/AUDIO]

(KV-29AL42/29AL42C/29AL66/29AL66C ONLY)



HV BOARD SCHEMATIC DIAGRAM



C BOARD IC VOLTAGE LIST

IC1403		19	0.0
pin	volt	20	4.5
1	4.5	21	4.5
2	4.5	22	4.5
3	4.5	23	4.5
4	4.5	24	4.5
5	4.5	25	4.5
6	4.5	26	4.5
7	4.5	27	4.5
8	4.5	28	4.5
9	4.5	29	4.5
10	4.5	30	4.5
11	4.5	IC2003	
12	4.4	pin	volt
13	4.4	1	3.9
14	4.4	2	5.0
15	4.5	3	GND
16	8.9		
17	GND		
18	0.0		

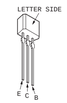
All voltages are in V

Schematic Diagrams
◀ CV C E boards HV board ▶

6.4 SEMICONDUCTORS

2SA1162-G
2SD601A-Q

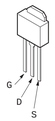
2SD2144S
2SA1175-HFE
2SC2785-HFE
2SA933AS-QT



2SC3209LK
2SD1312-K

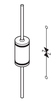
2SC4159-E

2SK2845-LB102



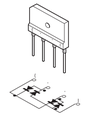
2SC5426-01

RD9.1EW

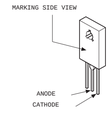


MA111-TX

D4SB60L-F



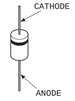
D5LC20U



RU4AM-T3

D1N20R
MTZJ-33
MTZJ-30D
MTZJ-5.1C
RD3.3ESB2
RD5.6ESB2
RD8.23SB2
RD10ESB2

U05G
MTZJ-T-77-2.2A
ERA22-08
LNK0120022G
1SS133T-77
ERC06-15S
MDV04-600
RU-1P



D1NL20-U
EGP20G
EL1Z
1SS83
RGP02-17EL
GP08D

SECTION 6
EXPLODED VIEWS

• Items with no part number and no description are not stocked because they are seldom required for routine service.

• The component parts of an assembly are indicated by the reference numbers in the remarks column.

• Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Note:

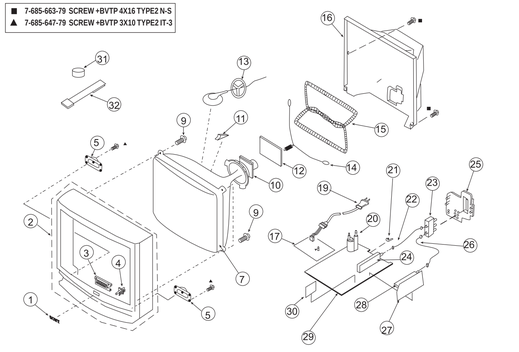
The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note:

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

7-1. CHASSIS (KV-27S66)

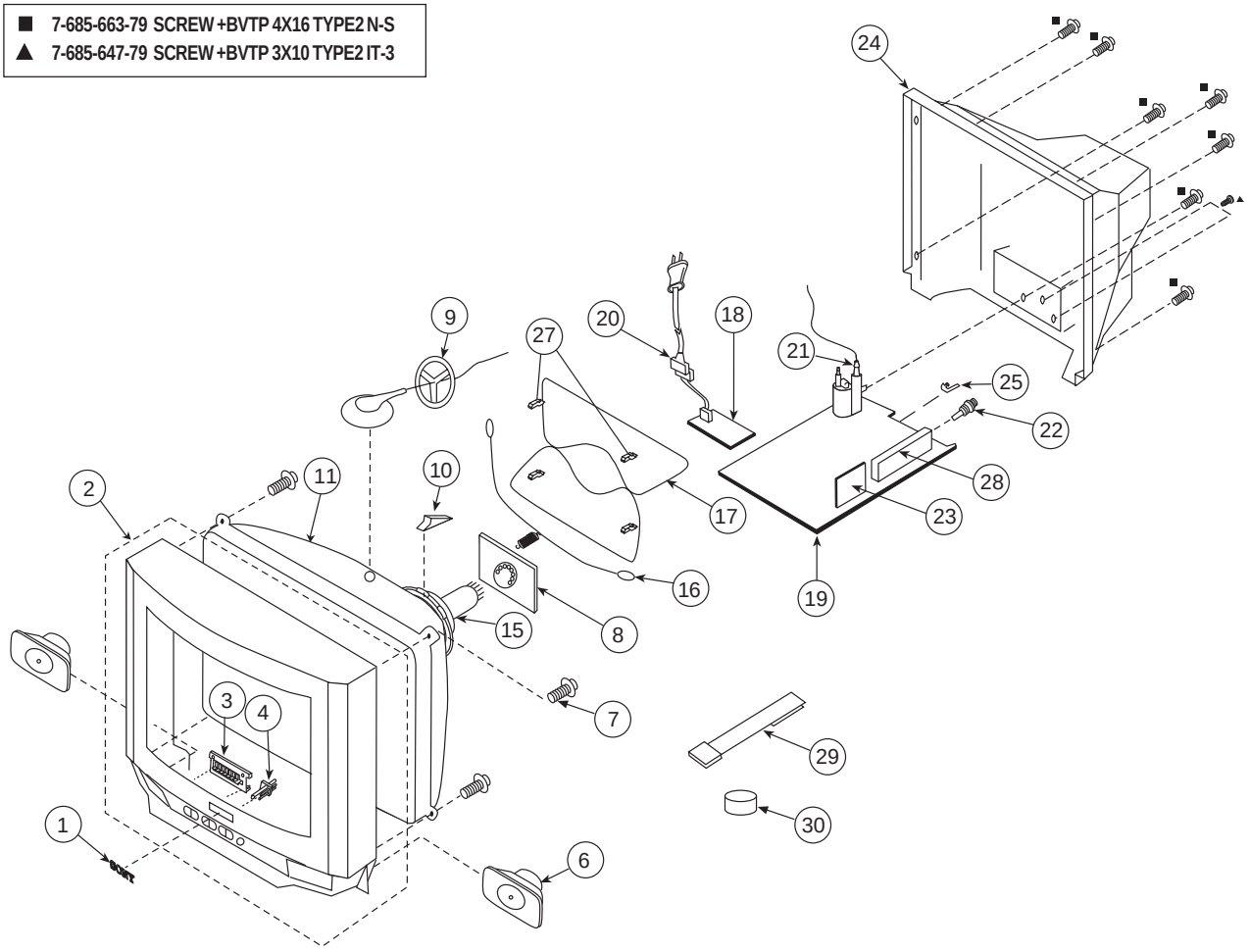
■ 7-685-663-79 SCREW +BVTP 4X16 TYPE2 N-S
▲ 7-685-647-79 SCREW +BVTP 3X10 TYPE2 IT-3



REF NO.	PART NO.	DESCRIPTION	REMARK
1	4-046-160-11	EMBLEM (NO.9), SONY	
2	X-4035-817-1	BEZNET ASSY	3,4
3	4-063-573-01	MULTI BUTTON	
4	4-063-570-01	GUIDE, LED	
5	1-504-531-11	SPEAKER (13.1X6.2CM)	
7	⚠ 8-733-874-05	CRT 29NX	
9	4-041-268-01	SCREW (7), TAPPING	
10	⚠ 8-451-846-21	DYY29NXA-V2	
11	4-053-005-01	SPACER, DY	
12	* A-1331-920-A	C MOUNTED PC BOARD	
13	3-704-372-31	HOLDER, HV CABLE	
14	4-036-329-01	SPRING (B), TENSION	
15	⚠ 1-416-588-1	COIL, DEMAGNETIC	
16	4-063-572-21	COVER, REAR	
17	* A-1343-654-A	E (VAR) MOUNTED PC BOARD	
19	⚠ 1-790-130-21	CORD, AC	
20	⚠ 1-453-268-21	FBT ASSY, NX-4005//X4J4	
21	4-064-646-01	CHASSIS, CLIP	
22	1-557-056-31	CABLE, P-P	
23	8-598-414-00	ANTENNA SWITCH	
24	⚠ 8-598-431-00	TUNER, FSS BTF-WA411	
25	4-064-176-01	BRACKET ANTENNA	
26	1-783-800-11	CABLE, PIN	
27	* A-1380-611-A	K (VAR) MOUNTED PC BOARD	
28	⚠ 8-598-430-00	TUNER, FSS BTF-FA401	
29	* A-1298-902-A	A COMPLETE PC BOARD	
30	* A-1195-154-A	P COMPLETE PC BOARD	
31	1-452-032-00	MAGNET, DISC	
32	4-062-047-01	PIECE A(110), CONV CORRECT	

7-2. CHASSIS (KV-27S46/27S42/29SL42/29SL42C/29SL46/29XL42M)

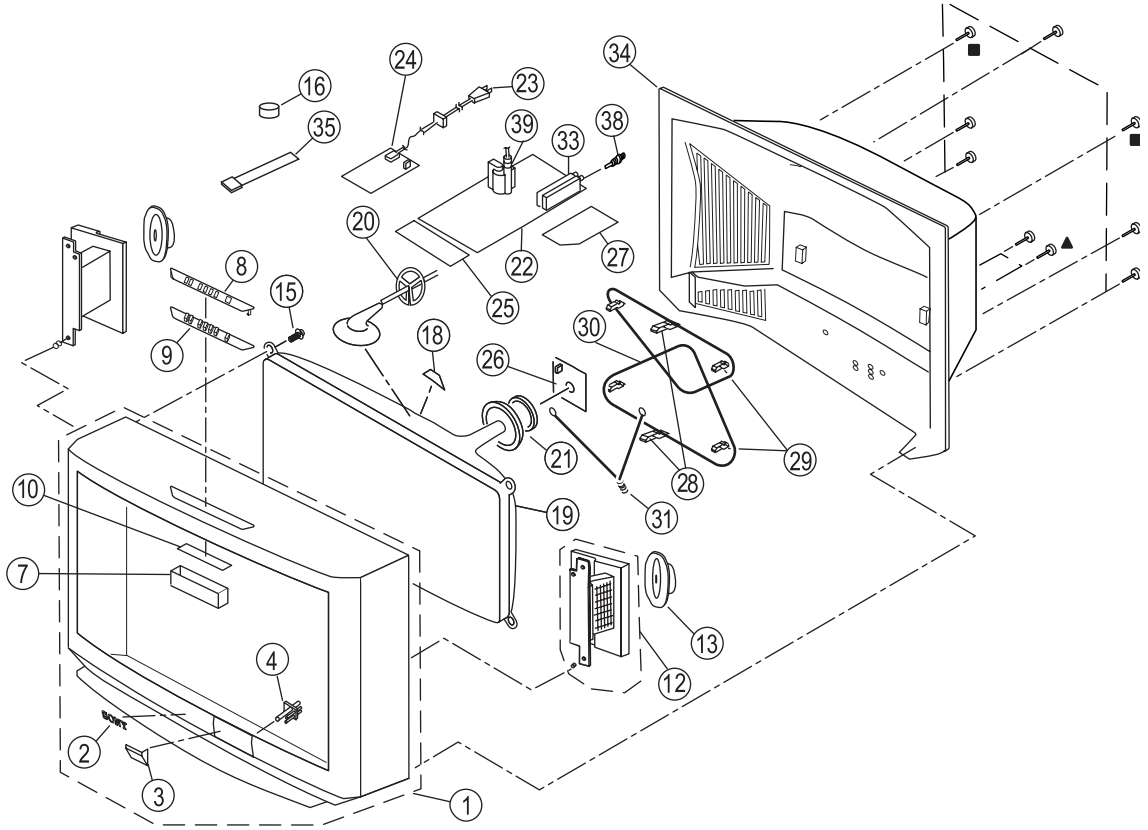
■ 7-685-663-79 SCREW +BVTP 4X16 TYPE2 N-S
▲ 7-685-647-79 SCREW +BVTP 3X10 TYPE2 IT-3



REF NO.		PART NO.	DESCRIPTION	REMARK
1		4-046-160-11	EMBLEM (NO.9), SONY	
2		X-4035-816-1	BEZNET ASSY (KV-27S46/29SL46)	3-4
2		X-4035-818-1	BEZNET ASSY (KV-29XL42M)	3-4
2		X-4035-815-1	BEZNET ASSY (KV-27S42/29SL42/42C)	3-4
3		4-063-573-01	MULTI BUTTON	
4		4-063-570-01	GUIDE, LED	
6		1-504-531011	SPEAKER (13.1 x 6.2CM)	
7		4-041-268-01	SCREW (7), TAPPING	
8	*	A-1331-920-A	C MOUNTED PC BOARD	
9		3-704-372-31	HOLDER, HV CABLE	
10		4-053-005-01	SPACER, DY	
11	⚠	8-733-873-05	CRT 29NX (EXCEPT KV-29SL42C)	
11	⚠	8-733-874-05	CRT 29NX (KV-29SL42C only)	
15	⚠	8-451-846-21	DYY29NXA-V2	
16		4-036-329-01	SPRING (B), TENSION	
17	⚠	1-416-952-11	COIL, DEGAUSSING (KV-29SL42/29XL42M/29SL42C/29SL46)	
17	⚠	1-416-588-11	COIL, DEMAGNETIC (KV-27S42/27S46)	
18	*	A-1343-656-A	E (VAR) MOUNTED PC BOARD (KV-29SL42/29XL42M/29SL46)	
18	*	A-1343-654-A	E (VAR) MOUNTED PC BOARD (KV-27S42/27S46)	
19	*	A-1298-900-A	A COMPLETE PC BOARD (KV-27S46)	
19	*	A-1298-904-A	A COMPLETE PC BOARD (KV-29XL42M/29SL42/29SL42C)	
19	*	A-1298-911-A	A COMPLETE PC BOARD (KV-29SL46)	
19	*	A-1298-840-A	A COMPLETE PC BOARD (KV-27S42)	
20	⚠	1-790-130-21	CORD, AC (KV-27S42/27S46)	
20	⚠	1-751-057-11	CORD, POWER (WITH CONNECTOR) 10A/125V (KV-29SL42/29XL42M/29SL46)	
20	⚠	1-769-796-31	CORD, POWER (WITH CONNECTOR) 10A/125V (KV-29SL42C)	
21	⚠	1-453-268-21	FBT ASSY NX-4005//X4J4	
22		1-766-374-11	PLUG, F-PIN	
23	*	A-1195-154-A	P COMPLETE PC BOARD (KV-27S46/29SL46)	
24		4-063-572-02	COVER, REAR	
25		4-064-646-01	CHASSIS, CLIP	
27		4-040-388-01	HOLDER (S), DGC (EXCEPT KV-29SL46)	
28	⚠	8-598-431-00	TUNER, FSS BTF-WA411	
29		4-062-047-01	PIECE A(110), CONV CORRECT	
30		1-452-032-00	MAGNET,DISC	

7-3. CHASSIS (KV-29AL42/29AL42C)

■ 7-685-663-79 SCREW +BVTP 4X16 TYPE2 N-S
▲ 7-685-647-79 SCREW +BVTP 3X10 TYPE2 IT-3

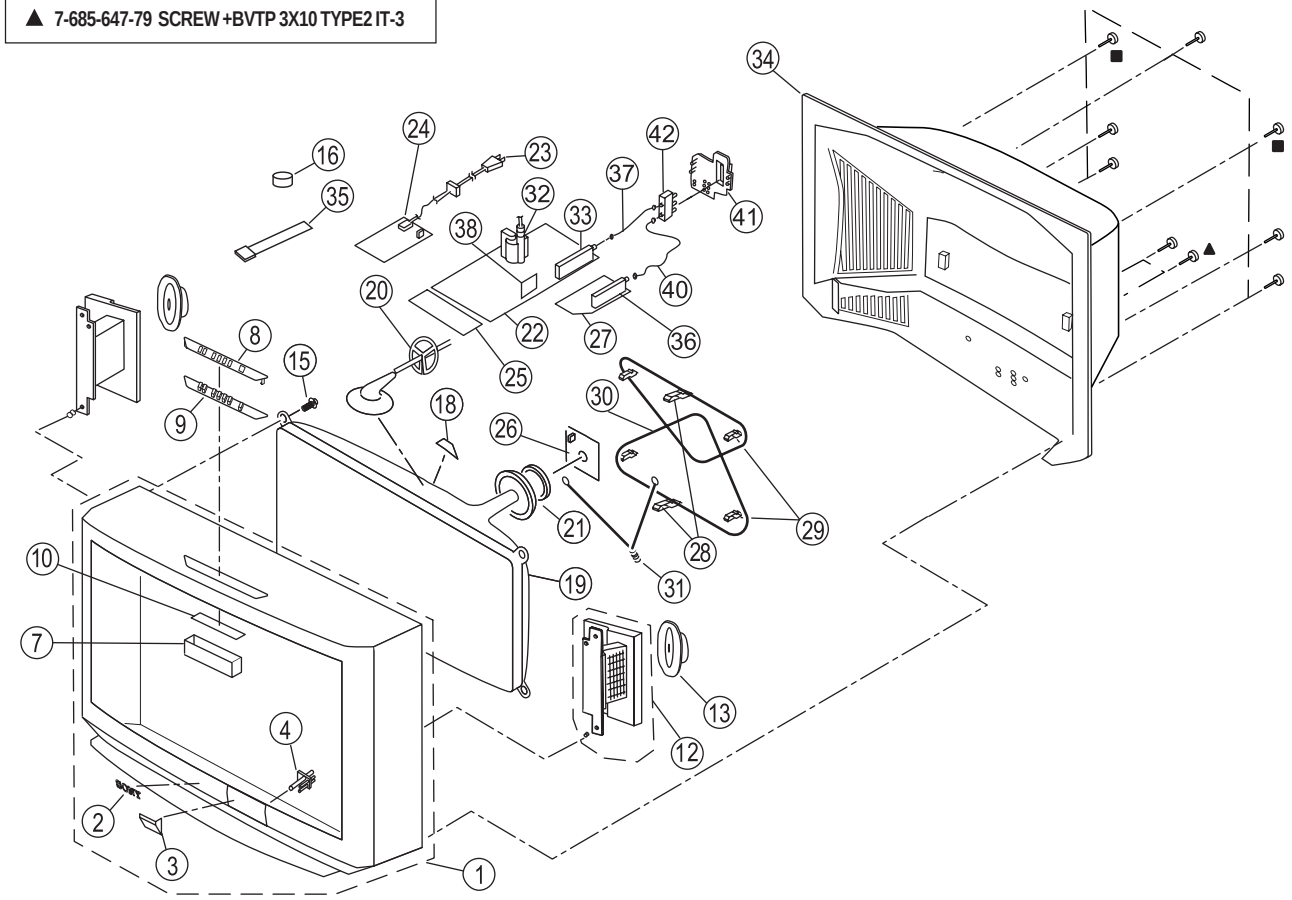


REF NO.	PART NO.	DESCRIPTION	REMARK
1	X-4035-965-1	BEZNET ASSY	2-4
2	4-046-160-01	EMBLEM (NO.9), SONY	
3	4-064-768-01	DOOR	
4	4-064-767-01	GUIDE, LED	
7	4-064-764-01	BRACKET, TOP CONTROL	
8	4-064-763-01	PANEL, TOP CONTROL	
9	4-064-765-01	BUTTON, TOP CONTROL	
10 *	1-1372-616-A	HT MOUNTED PC BOARD	
12	X-4035-964-1	BAFFLE ASSY, SPEAKER	
13	1-505-993-11	SPEAKER (8X13CM)	
15	4-041-268-01	SCREW (7), TAPPING	
16	1-452-032-00	MAGNET,DISC	
18	4-053-005-01	SPACER, DY	
19 ⚠	8-733-873-05	CRT 29NX (KV-29AL42)	
19 ⚠	8-733-874-05	CRT 29NX (KV-29AL42C)	
20	3-704-372-31	HOLDER, HV CABLE	

REF NO.	PART NO.	DESCRIPTION	REMARK
21 ⚠	8-451-486-11	DY Y29NXA-V	
22 *	A-1298-903-A	A COMPLETE PC BOARD (KV-29AL42/42C)	
23 ⚠	1-751-057-11	CORD, POWER (WITH CONNECTOR) 10A/125V	
24 *	A-1343-656-A	E (VAR) MOUNTED PC BOARD	
25 *	A-1372-617-A	HV (VAR) MOUNTED PC BOARD	
26 *	A-1331-921-A	CV MOUNTED PC BOARD	
27 *	A-1380-612-A	K (VAR) MOUNTED PC BOARD	
28	4-040-387-01	HOLDER (M), DGC	
29	4-040-388-01	HOLDER (S), DGC	
30 ⚠	1-416-952-11	COIL, DEGAUSSING	
31	4-036-329-01	SPRING (B), TENSION	
33 ⚠	8-598-431-00	TUNER, FSS BTF-A411	
34	4-064-762-11	COVER, REAR	
35	4-062-047-01	PIECE A (110), CONV CORRECT	
38	1-766-374-11	PLUG, F-PIN	
39 ⚠	1-453-268-21	TRANSFORMER, FBT ASSY NX-4005//X4J4	

7-4. CHASSIS (KV-29AL66/29AL66C)

■ 7-685-663-79 SCREW +BVTP 4X16 TYPE2 N-S
▲ 7-685-647-79 SCREW +BVTP 3X10 TYPE2 IT-3



REF NO.	PART NO.	DESCRIPTION	REMARK
1	X-4036-607-1	BEZNET ASSY	2-4
2	4-046-160-01	EMBLEM (NO.9), SONY	
3	4-064-768-01	DOOR	
4	4-064-767-01	GUIDE, LED	
7	4-064-764-01	BRACKET, TOP CONTROL	
8	4-064-763-01	PANEL, TOP CONTROL	
9	4-064-765-01	BUTTON, TOP CONTROL	
10 *	1-1372-616-A	HT MOUNTED PC BOARD	
12	X-4035-964-1	BAFFLE ASSY, SPEAKER	
13	1-505-993-11	SPEAKER (8X13CM)	
15	4-041-268-01	SCREW (7), TAPPING	
16	1-452-032-00	MAGNET,DISC	
18	4-053-005-01	SPACER, DY	
19 ⚠	8-733-874-05	CRT 29NX (KV-29AL66C)	
19 ⚠	8-733-873-05	CRT 29NX (KV-29AL66)	
20	3-704-372-31	HOLDER, HV CABLE	
21 ⚠	8-451-486-11	DY Y29NXA-V	
22 *	A-1298-842-A	A COMPLETE PC BOARD	
23 ⚠	1-751-057-11	CORD, POWER (WITH CONNECTOR) 10A/125V (KV-29AL66)	
23 ⚠	1-769-796-31	CORD, POWER (WITH CONNECTOR) 10A/125V (KV-29AL66C)	
24 *	A-1343-656-A	E (VAR) MOUNTED PC BOARD	
25	A-1372-617-A	HV (VAR) MOUNTED PC BOARD	
26 *	A-1331-921-A	CV MOUNTED PC BOARD	
27 *	A-1380-608-A	K (VAR) MOUNTED PC BOARD	
28	4-040-387-01	HOLDER (M), DGC	
29	4-040-388-01	HOLDER (S), DGC	
30 ⚠	1-416-952-11	COIL, DEGAUSSING	
31	4-036-329-01	SPRING (B), TENSION	
32 ⚠	1-453-268-21	TRANSFORMER, FBT ASSY NX-4005//X4J4	
33 ⚠	8-598-431-00	TUNER, FSS BTF-A411	
34	4-064-762-11	COVER, REAR	
35	4-062-047-01	PIECE A (110), CONV CORRECT	
36 ⚠	8-598-430-00	TUNER, BTF-FA401	
37	1-557-056-31	CABLE, P-P	
38 *	A-1195-154-A	P COMPLETE PC BOARD	
40	1-783-800-11	CABLE, PIN	
41	4-064-176-11	BRACKET, ANTENNA	
42	8-598-414-00	ANTENNA SWITCH AS-2F	

SECTION 8
ELECTRICAL PARTS LIST

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COMMON PARTS LISTING A

Note:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

The components identified by ⋈ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

Note:

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

• Items marked with a asterisk " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

When indicating parts by reference number, please include the board name.

A

*** A-1298-840-A A BOARD, COMPLETE (KV-27S42)**
*** A-1298-842-A A BOARD, COMPLETE (KV-29AL66/29AL66C)**
*** A-1298-900-A A BOARD, COMPLETE (KV-27S46)**
*** A-1298-902-A A BOARD, COMPLETE (KV-27S66)**
*** A-1298-903-A A BOARD, COMPLETE (KV-29AL42/29AL42C)**
*** A-1298-904-A A BOARD, COMPLETE (KV-29SL42/29SL42C/29XL42M/)**
*** A-1298-911-A A BOARD, COMPLETE (KV-29SL46)**

4-382-854-11 SCREW (M3X10), P, SW (+)

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C001	1-163-259-91	CERAMIC	220pF	5%	50V
C004	1-104-664-11	ELECT	47µF	20%	25V
C005	1-126-960-11	ELECT	1µF	20%	50V
C006	1-163-035-00	CERAMIC	0.047µF		50V
C007	1-163-259-91	CERAMIC	220pF	5%	50V
C008	1-163-009-11	CERAMIC	0.001µF	10%	50V
C010	1-163-009-11	CERAMIC	0.001µF	10%	50V
C011	1-163-009-11	CERAMIC	0.001µF	10%	50V
C012	1-163-009-11	CERAMIC	0.001µF	10%	50V
C014	1-164-004-11	CERAMIC	0.1µF	10%	25V
C017	1-126-960-11	ELECT	1µF	20%	50V
C019	1-163-135-00	CERAMIC	560pF	5%	50V
C020	1-130-495-00	FILM	0.1µF	5%	50V
C021	1-163-259-91	CERAMIC	220pF	5%	50V
C028	1-163-005-11	CERAMIC	470pF	10%	50V
C030	1-163-259-91	CERAMIC	220pF	5%	50V
C034	1-163-037-11	CERAMIC	0.022µF	10%	50V
C037	1-164-161-11	CERAMIC	0.0022µF	10%	50V
C038	1-126-941-11	ELECT	470µF	20%	25V
C039	1-126-964-11	ELECT	10µF	20%	50V
C046	1-104-664-11	ELECT	47µF	20%	25V
C047	1-163-259-91	CERAMIC	220pF	5%	50V
C048	1-163-009-11	CERAMIC	0.001µF	10%	50V
C055	1-163-251-11	CERAMIC	100pF	5%	50V
C060	1-163-005-11	CERAMIC	470pF	10%	50V
C062	1-164-161-11	CERAMIC	0.0022µF	10%	50V
C065	1-163-009-11	CERAMIC	0.001µF	10%	50V
C070	1-163-259-91	CERAMIC	220pF	5%	50V
C080	1-164-005-11	CERAMIC	0.47µF		25V
C081	1-164-005-11	CERAMIC	0.47µF		25V
C091	1-163-231-11	CERAMIC	15pF	5%	50V
C092	1-163-231-11	CERAMIC	15pF	5%	50V
C101	1-126-963-11	ELECT	4.7µF	20%	50V
C102	1-126-933-11	ELECT	100µF	20%	16V
C150	1-126-941-11	ELECT	470µF	20%	25V
C151	1-104-664-11	ELECT	47µF	20%	25V
C200	1-126-959-11	ELECT	0.47µF	20%	50V
C201	1-126-960-11	ELECT	1µF	20%	50V
C202	1-126-960-11	ELECT	1µF	20%	50V
C207	1-126-959-11	ELECT	0.47µF	20%	50V
C208	1-126-959-11	ELECT	0.47µF	20%	50V
C209	1-126-963-11	ELECT	4.7µF	20%	50V
C211	1-126-964-11	ELECT	10µF	20%	50V
C212	1-126-963-11	ELECT	4.7µF	20%	50V
C213	1-126-964-11	ELECT	10µF	20%	50V
C216		VARIANT (SEE VARIANT PARTS LIST)			
C217		VARIANT (SEE VARIANT PARTS LIST)			
C218	1-126-941-11	ELECT	470µF	20%	25V
C219	1-130-495-00	FILM	0.1µF	5%	50V
C222	1-126-964-11	ELECT	10µF	20%	50V
C226	1-126-963-11	ELECT	4.7µF	20%	50V
C243	1-163-017-00	CERAMIC	0.0047µF	10%	50V
C250		VARIANT (SEE VARIANT PARTS LIST)			
C251		VARIANT (SEE VARIANT PARTS LIST)			
C252		VARIANT (SEE VARIANT PARTS LIST)			
C255	1-104-760-11	CERAMIC	0.047µF	10%	50V
C256	1-126-960-11	ELECT	1µF	20%	50V
C257	1-126-960-11	ELECT	1µF	20%	50V
C258	1-126-959-11	ELECT	0.47µF	20%	50V
C259	1-163-021-91	CERAMIC	0.01µF	10%	50V
C280		VARIANT (SEE VARIANT PARTS LIST)			
C281		VARIANT (SEE VARIANT PARTS LIST)			
C282		VARIANT (SEE VARIANT PARTS LIST)			
C284	1-104-664-11	ELECT	47µF	20%	25V
C285	1-126-933-11	ELECT	100µF	20%	16V
C286	1-163-251-11	CERAMIC	100pF	5%	50V

A COMMON PARTS LISTING

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C287	1-126-959-11	ELECT	0.47µF	20%	50V
C288	1-126-960-11	ELECT	1µF	20%	50V
C289	1-126-960-11	ELECT	1µF	20%	50V
C290	1-164-005-11	CERAMIC	0.47µF		25V
C301	1-163-233-11	CERAMIC	18pF	5%	50V
C303	1-126-963-11	ELECT	4.7µF	20%	50V
C304	1-163-038-91	CERAMIC	0.1µF		25V
C305	1-164-004-11	CERAMIC	0.1µF	10%	25V
C306	1-164-004-11	CERAMIC	0.1µF	10%	25V
C307	1-126-964-11	ELECT	10µF	20%	50V
C308	1-126-964-11	ELECT	10µF	20%	50V
C309	1-163-021-91	CERAMIC	0.01µF	10%	50V
C310	1-126-960-11	ELECT	1µF	20%	50V
C311	1-163-021-91	CERAMIC	0.01µF	10%	50V
C312	1-126-942-61	ELECT	1000µF	20%	25V
C313	1-163-021-91	CERAMIC	0.01µF	10%	50V
C314	1-163-003-11	CERAMIC	330pF	10%	50V
C316	1-163-021-91	CERAMIC	0.01µF	10%	50V
C317	1-163-021-91	CERAMIC	0.01µF	10%	50V
C318	1-163-021-91	CERAMIC	0.01µF	10%	50V
C319	1-126-963-11	ELECT	4.7µF	20%	50V
C320	1-126-959-11	ELECT	0.47µF	20%	50V
C321	1-163-133-00	CERAMIC	470pF	5%	50V
C323	1-163-121-00	CERAMIC	150pF	5%	50V
C324	1-163-251-11	CERAMIC	100pF	5%	50V
C331	1-163-005-11	CERAMIC	470pF	10%	50V
C332	1-163-009-11	CERAMIC	0.001µF	10%	50V
C350	1-163-021-91	CERAMIC	0.01µF	10%	50V
C351	1-126-964-11	ELECT	10µF	20%	50V
C352	1-163-021-91	CERAMIC	0.01µF	10%	50V
C353	1-163-038-91	CERAMIC	0.1µF		25V
C354	1-163-038-91	CERAMIC	0.1µF		25V
C355	1-164-222-11	CERAMIC	0.22µF		25V
C356	1-163-038-91	CERAMIC	0.1µF		25V
C357	1-163-021-91	CERAMIC	0.01µF	10%	50V
C358	1-104-664-11	ELECT	47µF	20%	25V
C359	1-163-021-91	CERAMIC	0.01µF	10%	50V
C360	1-163-021-91	CERAMIC	0.01µF	10%	50V
C361	1-163-037-11	CERAMIC	0.022µF	10%	50V
C362	1-126-964-11	ELECT	10µF	20%	50V
C363	1-126-960-11	ELECT	1µF	20%	50V
C370		VARIANT (SEE VARIANT PARTS LIST)			
C371		VARIANT (SEE VARIANT PARTS LIST)			
C372		VARIANT (SEE VARIANT PARTS LIST)			
C373	1-163-038-91	CERAMIC	0.1µF		25V
C374	1-126-935-11	ELECT	470µF	20%	16V
C375	1-163-038-91	CERAMIC	0.1µF		25V
C376	1-104-664-11	ELECT	47µF	20%	25V
C377	1-126-964-11	ELECT	10µF	20%	50V
C380		VARIANT (SEE VARIANT PARTS LIST)			
C381		VARIANT (SEE VARIANT PARTS LIST)			
C382		VARIANT (SEE VARIANT PARTS LIST)			
C390	1-126-959-11	ELECT	0.47µF	20%	50V
C399	1-126-964-11	ELECT	10µF	20%	50V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C400	1-126-963-11	ELECT	4.7µF	20%	50V
C401	1-126-956-91	ELECT	0.1µF	20%	50V
C402	1-163-017-00	CERAMIC	0.0047µF	10%	50V
C403	1-126-963-11	ELECT	4.7µF	20%	50V
C404	1-126-963-11	ELECT	4.7µF	20%	50V
C405	1-126-963-11	ELECT	4.7µF	20%	50V
C406	1-126-963-11	ELECT	4.7µF	20%	50V
C407	1-126-964-11	ELECT	10µF	20%	50V
C410	1-126-963-11	ELECT	4.7µF	20%	50V
C411	1-126-956-91	ELECT	0.1µF	20%	50V
C412	1-130-495-00	FILM	0.1µF	5%	50V
C413	1-126-967-11	ELECT	47µF	20%	50V
C414	1-163-017-00	CERAMIC	0.0047µF	10%	50V
C415	1-126-956-91	ELECT	0.1µF	20%	50V
C416	1-126-963-11	ELECT	4.7µF	20%	50V
C418		VARIANT (SEE VARIANT PARTS LIST)			
C501	1-102-112-00	CERAMIC	330pF	10%	50V
C502	1-106-383-00	MYLAR	0.047µF	10%	200V
C503	1-102-212-00	CERAMIC	820pF	10%	500V
C504	1-102-002-00	CERAMIC	680pF	10%	500V
C505⚠	1-162-134-11	CERAMIC	470pF	10%	2KV
C507⚠	1-119-969-11	MYLAR	14000pF	3%	1.5KV
C508⚠	1-107-364-11	MYLAR	0.01µF	10%	200V
C509⚠	1-162-116-00	CERAMIC	680pF	10%	2KV
C510	1-107-649-11	ELECT	2.2µF	20%	250V
C511⚠	1-117-673-11	FILM	1.5µF	5%	250V
C512	1-106-395-00	MYLAR	0.15µF	10%	200V
C513	1-106-343-00	MYLAR	0.001µF	10%	100V
C514	1-117-891-11	FILM	0.62µF	5%	250V
C515⚠	1-162-116-00	CERAMIC	680pF	10%	2KV
C520⚠	1-129-722-00	FILM	0.047µF	5%	630V
C521	1-164-646-11	CERAMIC	2200pF	10%	500V
C523	1-107-652-11	ELECT	10µF	20%	250V
C524	1-102-244-00	CERAMIC	220pF	10%	500V
C525	1-162-815-11	CERAMIC	47pF	5%	500V
C526	1-126-960-11	ELECT	1µF	20%	50V
C527	1-126-965-11	ELECT	22µF	20%	50V
C528	1-164-690-91	CERAMIC	0.0022µF	5%	50V
C529	1-164-161-11	CERAMIC	0.0022µF	10%	50V
C530	1-163-009-11	CERAMIC	0.001µF	10%	50V
C531	1-106-387-00	MYLAR	0.068µF	10%	200V
C541	1-126-969-11	ELECT	220µF	20%	50V
C542	1-126-967-11	ELECT	47µF	20%	50V
C543	1-137-194-81	FILM	0.47µF	5%	50V
C553	1-107-662-11	ELECT	22µF	20%	250V
C555	1-164-161-11	CERAMIC	0.0022µF	10%	50V
C562	1-126-941-11	ELECT	470µF	20%	25V
C564	1-126-941-11	ELECT	470µF	20%	25V
C571⚠	1-126-964-11	ELECT	10µF	20%	50V
C573	1-126-963-11	ELECT	4.7µF	20%	50V
C574	1-107-635-11	ELECT	4.7µF	20%	160V
C575⚠	1-163-021-91	CERAMIC	0.01µF	10%	50V
C576	1-123-024-21	ELECT	33µF		160V
C581	1-126-963-11	ELECT	4.7µF	20%	50V

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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COMMON PARTS LISTING A

REF.NO.	PART NO.	DESCRIPTION			REMARK
C591	1-106-355-12	MYLAR	0.0033µF	10%	200V
C601	1-130-495-00	MYLAR	0.1µF	5%	50V
C602	1-126-967-11	ELECT	47µF	20%	50V
C609	1-126-968-11	ELECT	100µF	20%	50V
C610	1-126-964-11	ELECT	10µF	20%	50V
C613		VARIANT (SEE VARIANT PARTS LIST)			
C614	1-126-964-11	ELECT	10µF	20%	50V
C615		VARIANT (SEE VARIANT PARTS LIST)			
C616		VARIANT (SEE VARIANT PARTS LIST)			
C617		VARIANT (SEE VARIANT PARTS LIST)			
C618	1-125-893-11	FILM	680pF	3%	1.5KV
C620	1-164-081-11	CERAMIC	470pF	10%	50V
C621	1-136-356-11	FILM	470pF	5%	50V
C625	1-164-625-11	CERAMIC	680pF	10%	500V
C626	1-126-933-11	ELECT	100µF	20%	16V
C627		VARIANT (SEE VARIANT PARTS LIST)			
C629	1-104-665-11	ELECT	100µF	20%	25V
C630	1-124-347-00	ELECT	100µF	20%	160V
C631	1-126-944-11	ELECT	3300µF	20%	25V
C633	1-104-341-11	FILM	0.1µF	10%	250V
C634	1-130-471-00	MYLAR	0.001µF	5%	50V
C638	1-104-665-11	ELECT	100µF	20%	25V
C639	1-125-772-91	CERAMIC	1500pF	10%	2KV
C640	1-164-625-11	CERAMIC	680pF	10%	500V
C641	1-126-943-11	ELECT	2200µF	20%	25V
C653	1-104-664-11	ELECT	47µF	20%	25V
C654	1-126-933-11	ELECT	100µF	20%	16V
C655	1-107-636-11	ELECT	10µF	20%	160V
C690	1-126-959-11	ELECT	0.47µF	20%	50V
C691	1-126-941-11	ELECT	470µF	20%	25V
C692	1-104-664-11	ELECT	47µF	20%	25V
C693	1-137-194-81	FILM	0.47µF	5%	50V
C699		VARIANT (SEE VARIANT PARTS LIST)			

CONNECTOR

CN101	1-508-786-00	PIN, CONNECTOR (5MM PITCH)	2P
CN150		VARIANT (SEE VARIANT PARTS LIST)	
CN151		VARIANT (SEE VARIANT PARTS LIST)	
CN152		VARIANT (SEE VARIANT PARTS LIST)	
CN203	1-560-124-00	PLUG, CONNECTOR (2.5MM)	4P
CN251		VARIANT (SEE VARIANT PARTS LIST)	
CN253		VARIANT (SEE VARIANT PARTS LIST)	
CN254	1-564-508-11	PLUG, CONNECTOR	5P
CN255	1-564-510-11	PLUG, CONNECTOR	7P
CN301		VARIANT (SEE VARIANT PARTS LIST)	
CN302		VARIANT (SEE VARIANT PARTS LIST)	
CN401	1-564-505-11	PLUG, CONNECTOR	2P
CN402	1-564-505-11	PLUG, CONNECTOR	2P
CN501	1-580-798-11	CONNECTOR PIN (DY)	6P
CN502	1-564-509-11	PLUG, CONNECTOR	6P
CN601	1-580-843-11	PIN, CONNECTOR (POWER)	2P
CN602	1-508-786-00	PIN, CONNECTOR (5MM PITCH)	2P
CN604	1-564-506-11	PLUG, CONNECTOR	3P

REF.NO.	PART NO.	DESCRIPTION	REMARK

DIODE

D001	8-719-921-44	DIODE MTZJ-5.1C	
D002		VARIANT (SEE VARIANT PARTS LIST)	
D003	8-719-991-33	DIODE 1SS133T-77	
D004	8-719-991-33	DIODE 1SS133T-77	
D005	8-719-109-89	DIODE RD5.6ESB2	
D201	8-719-110-17	DIODE RD10ESB2	
D202	8-719-110-17	DIODE RD10ESB2	
D204	8-719-110-17	DIODE RD10ESB2	
D205	8-719-982-22	DIODE MTZJ-30D	
D207	8-719-109-66	DIODE RD3.3ESB2	
D208		VARIANT (SEE VARIANT PARTS LIST)	
D250	8-719-108-12	DIODE RD9.1EW	
D251	8-719-108-12	DIODE RD9.1EW	
D252	8-719-110-17	DIODE RD10ESB2	
D253	8-719-110-17	DIODE RD10ESB2	
D254	8-719-110-17	DIODE RD10ESB2	
D255	8-719-110-17	DIODE RD10ESB2	
D280		VARIANT (SEE VARIANT PARTS LIST)	
D281		VARIANT (SEE VARIANT PARTS LIST)	
D302	8-719-921-44	DIODE MTZJ-5.1C	
D303	8-719-991-33	DIODE 1SS133T-77	
D304	8-719-991-33	DIODE 1SS133T-77	
D305	8-719-991-33	DIODE 1SS133T-77	
D306	8-719-991-33	DIODE 1SS133T-77	
D388	8-719-921-44	DIODE MTZJ-5.1C	
D403		VARIANT (SEE VARIANT PARTS LIST)	
D501	8-719-945-80	DIODE ERC06-15S	
D502	8-719-908-03	DIODE GP08D	
D503	8-719-908-03	DIODE GP08D	
D520	8-719-067-63	DIODE MDV04-600RL	
D521	8-719-302-43	DIODE EL1Z	
D522	8-719-991-33	DIODE 1SS133T-77	
D523	8-719-991-33	DIODE 1SS133T-77	
D541	8-719-908-03	DIODE GP08D	
D550	8-719-110-08	DIODE RD8.2ESB2	
D551	8-719-991-33	DIODE 1SS133T-77	
D552	8-719-302-43	DIODE EL1Z	
D561	8-719-979-85	DIODE EGP20G	
D562	8-719-979-85	DIODE EGP20G	
D571⚠	8-719-991-33	DIODE 1SS133T-77	
D572	8-719-991-33	DIODE 1SS133T-77	
D573	8-719-110-08	DIODE RD8.2ESB2	
D574	8-719-302-43	DIODE EL1Z	
D581⚠	8-719-991-33	DIODE 1SS133T-77	
D602	8-719-991-33	DIODE 1SS133T-77	
D603	8-719-982-26	DIODE MTZJ-33B	
D604	8-719-028-72	DIODE RGP02-17EL-6433	
D605	8-719-510-53	DIODE D4SB60L	
D606	8-719-108-18	THYRISTOR 5P6M	
D607	8-719-991-33	DIODE 1SS133T-77	
D608	8-719-110-53	DIODE RD20ESB2	
D609		VARIANT (SEE VARIANT PARTS LIST)	

A COMMON PARTS LISTING

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REF.NO.	PART NO.	DESCRIPTION	REMARK
D610	8-719-510-02	DIODE D1NS4	
D611	8-719-063-70	DIODE D1NL20U	
D612	8-719-110-17	DIODE RD10ESB2	
D613	8-719-063-70	DIODE D1NL20U	
D614	8-719-063-70	DIODE D1NL20U	
D615	8-719-312-10	DIODE RU4AM-T3	
D617	8-719-510-37	DIODE D5LC20U	
D620	8-719-110-17	DIODE RD10ESB2	
D630	8-719-510-37	DIODE D5LC20U	
D640	8-719-991-33	DIODE 1SS133T-77	
D650	8-719-109-89	DIODE RD5.6ESB2	

FERRITE BEAD

FB350	1-216-295-91	SHORT	
FB501	1-410-396-41	FERRITE	0.45µH
FB521	1-410-397-21	FERRITE	1.1µH
FB522	1-410-397-21	FERRITE	1.1µH
FB600	1-412-911-11	FERRITE	
FB601	1-412-911-11	FERRITE	
FB602	1-412-911-11	FERRITE	
FB603	1-412-911-11	FERRITE	
FB604	1-412-911-11	FERRITE	
FB605	1-412-911-11	FERRITE	
FB606	1-412-911-11	FERRITE	
FB609	1-412-911-11	FERRITE	

IC

IC001	8-759-562-90	IC M37273µF-251SP	
IC002	8-759-575-47	IC NJM78LR05BM-TE2	
IC003	8-759-527-75	IC M24C04-MN6T	
IC004		VARIANT (SEE VARIANT PARTS LIST)	
IC010	8-759-450-93	IC NJM2521M-TE1	
IC202	8-759-100-96	IC UPC4558G2	
IC203		VARIANT (SEE VARIANT PARTS LIST)	
IC301	8-752-090-39	IC CXA2133S	
IC302	8-752-385-80	IC CXD2073S	
IC401		VARIANT (SEE VARIANT PARTS LIST)	
IC402	8-752-072-39	IC CXA2021S	
IC521	8-759-700-07	IC NJM2903M	
IC541	8-759-980-58	IC TDA8172	
IC601		VARIANT (SEE VARIANT PARTS LIST)	
IC602⚠	8-749-920-61	IC SE-135N	
IC604	8-759-198-03	IC PQ09RF21	

JACK

J200	1-774-750-21	JACK BLOCK, PIN 2P	
J201	1-774-751-11	TERMINAL BLOCK, S	
J202		VARIANT (SEE VARIANT PARTS LIST)	
J204		VARIANT (SEE VARIANT PARTS LIST)	

REF.NO.	PART NO.	DESCRIPTION	REMARK

CHIP CONDUCTOR

JR003	1-216-295-91	SHORT	

COIL

L001	1-414-267-11	INDUCTOR	10µH
L002	1-414-273-11	INDUCTOR	100µH
L003	1-414-273-11	INDUCTOR	100µH
L101	1-414-267-11	INDUCTOR	10µH
L150	1-414-273-11	INDUCTOR	100µH
L151	1-414-267-11	INDUCTOR	10µH
L301	1-414-271-11	INDUCTOR	47µH
L302	1-414-267-11	INDUCTOR	10µH
L350	1-414-267-11	INDUCTOR	10µH
L351	1-414-271-11	INDUCTOR	47µH
L501⚠	1-411-976-11	COIL, HORIZONTAL LINEARITY	
L502	1-412-552-11	INDUCTOR	2.2mH
L503	1-406-677-11	INDUCTOR	10mH
L504	1-412-533-21	INDUCTOR	47µH
L520	1-409-955-11	INDUCTOR	8mH
L591⚠	1-412-528-61	INDUCTOR	18µH
L601	1-412-529-11	INDUCTOR	22µH
L642	1-412-529-11	INDUCTOR	22µH
L643	1-412-525-31	INDUCTOR	10µH

PHOTO COUPLER

PH600⚠	8-749-010-64	PHOTO COUPLER PC123F2	

IC LINK

PS201		VARIANT (SEE VARIANT PARTS LIST)	

TRANSISTOR

Q001	8-729-216-22	TRANSISTOR 2SA1162-G	
Q080		VARIANT (SEE VARIANT PARTS LIST)	
Q082	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q083	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q101	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q170	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q200	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q201	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q203	8-729-216-22	TRANSISTOR 2SA1162-G	
Q280		VARIANT (SEE VARIANT PARTS LIST)	
Q281		VARIANT (SEE VARIANT PARTS LIST)	
Q282		VARIANT (SEE VARIANT PARTS LIST)	
Q283		VARIANT (SEE VARIANT PARTS LIST)	
Q284		VARIANT (SEE VARIANT PARTS LIST)	
Q285		VARIANT (SEE VARIANT PARTS LIST)	

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COMMON PARTS LISTING A

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q286	8-729-216-22	TRANSISTOR 2SA1162-G	
Q287	8-729-216-22	TRANSISTOR 2SA1162-G	
Q288	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q300⚠	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q302	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q305	8-729-216-22	TRANSISTOR 2SA1162-G	
Q306	8-729-216-22	TRANSISTOR 2SA1162-G	
Q307	8-729-216-22	TRANSISTOR 2SA1162-G	
Q308	8-729-216-22	TRANSISTOR 2SA1162-G	
Q309	8-729-216-22	TRANSISTOR 2SA1162-G	
Q310	8-729-216-22	TRANSISTOR 2SA1162-G	
Q349	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q350	8-729-216-22	TRANSISTOR 2SA1162-G	
Q351	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q352	8-729-216-22	TRANSISTOR 2SA1162-G	
Q353	8-729-216-22	TRANSISTOR 2SA1162-G	
Q354	8-729-216-22	TRANSISTOR 2SA1162-G	
Q355	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q356	8-729-216-22	TRANSISTOR 2SA1162-G	
Q357	8-729-216-22	TRANSISTOR 2SA1162-G	
Q358	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q359	8-729-216-22	TRANSISTOR 2SA1162-G	
Q360	8-729-216-22	TRANSISTOR 2SA1162-G	
Q361	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q390		VARIANT (SEE VARIANT PARTS LIST)	
Q391		VARIANT (SEE VARIANT PARTS LIST)	
Q501	8-729-140-50	TRANSISTOR 2SC3209LK	
Q502	8-729-043-43	TRANSISTOR 2SC5426-01	
Q521	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q522	8-729-809-29	TRANSISTOR 2SC4159-E	
Q550	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q555	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q571⚠	8-729-200-17	TRANSISTOR 2SA1091-O	
Q601	8-729-922-37	TRANSISTOR 2SD2144S-UVW	
Q602	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q603	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q604	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q607	8-729-922-37	TRANSISTOR 2SD2144S-UVW	
Q610	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q630	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q650	8-729-111-55	TRANSISTOR 2SD1312-K	

RESISTOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
R001	1-216-033-00	RES, CHIP	220	5%	1/10W
R002	1-216-073-00	RES, CHIP	10K	5%	1/10W
R003	1-216-033-00	RES, CHIP	220	5%	1/10W
R004	1-216-073-00	RES, CHIP	10K	5%	1/10W
R005	1-216-295-91	SHORT			
R006	1-216-295-91	SHORT			
R007	1-216-025-91	RES, CHIP	100	5%	1/10W
R008	1-216-033-00	RES, CHIP	220	5%	1/10W
R010	1-216-033-00	RES, CHIP	220	5%	1/10W
R011	1-216-033-00	RES, CHIP	220	5%	1/10W
R013	1-216-081-00	RES, CHIP	22K	5%	1/10W
R016	1-216-041-00	RES, CHIP	470	5%	1/10W
R017	1-216-113-00	RES, CHIP	470K	5%	1/10W
R018	1-216-049-91	RES, CHIP	1K	5%	1/10W
R019	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R020		VARIANT (SEE VARIANT PARTS LIST)			
R021		VARIANT (SEE VARIANT PARTS LIST)			
R022		VARIANT (SEE VARIANT PARTS LIST)			
R023		VARIANT (SEE VARIANT PARTS LIST)			
R025	1-249-426-11	CARBON	5.6K	5%	1/4W
R026	1-249-426-11	CARBON	5.6K	5%	1/4W
R027	1-249-426-11	CARBON	5.6K	5%	1/4W
R028	1-216-049-91	RES, CHIP	1K	5%	1/10W
R031	1-216-045-00	RES, CHIP	680	5%	1/10W
R032	1-247-815-91	CARBON	220	5%	1/4W
R033	1-247-815-91	CARBON	220	5%	1/4W
R034	1-216-033-00	RES, CHIP	220	5%	1/10W
R035	1-216-033-00	RES, CHIP	220	5%	1/10W
R038	1-216-049-91	RES, CHIP	1K	5%	1/10W
R039	1-216-295-91	SHORT			
R040	1-249-413-11	CARBON	470	5%	1/4W
R041	1-216-033-00	RES, CHIP	220	5%	1/10W
R043	1-216-049-91	RES, CHIP	1K	5%	1/10W
R044	1-247-815-91	CARBON	220	5%	1/4W
R045	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R046	1-247-815-91	CARBON	220	5%	1/4W
R047	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R048	1-216-025-91	RES, CHIP	100	5%	1/10W
R049	1-216-089-91	RES, CHIP	47K	5%	1/10W
R050	1-216-073-00	RES, CHIP	10K	5%	1/10W
R051	1-216-033-00	RES, CHIP	220	5%	1/10W
R052	1-216-033-00	RES, CHIP	220	5%	1/10W
R054	1-216-073-00	RES, CHIP	10K	5%	1/10W
R056	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R057	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R058	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R060	1-216-295-91	SHORT			
R061	1-216-295-91	SHORT			
R065		VARIANT (SEE VARIANT PARTS LIST)			
R066	1-216-033-00	RES, CHIP	220	5%	1/10W
R069	1-247-815-91	CARBON	220	5%	1/4W
R070	1-249-425-11	CARBON	4.7K	5%	1/4W
R071	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R073	1-249-425-11	CARBON	4.7K	5%	1/4W
R074	1-216-073-00	RES, CHIP	10K	5%	1/10W
R075	1-216-073-00	RES, CHIP	10K	5%	1/10W
R076	1-216-121-91	RES, CHIP	1M	5%	1/10W
R077	1-216-097-91	RES, CHIP	100K	5%	1/10W
R080		VARIANT (SEE VARIANT PARTS LIST)			
R082		VARIANT (SEE VARIANT PARTS LIST)			
R083		VARIANT (SEE VARIANT PARTS LIST)			
R084		VARIANT (SEE VARIANT PARTS LIST)			
R085	1-216-049-91	RES, CHIP	1K	5%	1/10W
R086	1-216-045-00	RES, CHIP	680	5%	1/10W

A COMMON PARTS LISTING

REF.NO.	PART NO.	DESCRIPTION			REMARK
R087	1-216-045-00	RES, CHIP	680	5%	1/10W
R088	1-216-045-00	RES, CHIP	680	5%	1/10W
R090		VARIANT (SEE VARIANT PARTS LIST)			
R091	1-216-073-00	RES, CHIP	10K	5%	1/10W
R092	1-216-073-00	RES, CHIP	10K	5%	1/10W
R095	1-216-073-00	RES, CHIP	10K	5%	1/10W
R096	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R097	1-216-049-91	RES, CHIP	1K	5%	1/10W
R101	1-216-073-00	RES, CHIP	10K	5%	1/10W
R120	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R121	1-216-073-00	RES, CHIP	10K	5%	1/10W
R150	1-216-025-91	RES, CHIP	100	5%	1/10W
R151	1-216-025-91	RES, CHIP	100	5%	1/10W
R170	1-216-025-91	RES, CHIP	100	5%	1/10W
R171	1-216-049-91	RES, CHIP	1K	5%	1/10W
R172	1-216-295-91	SHORT			
R173	1-216-295-91	SHORT			
R200	1-216-022-00	RES, CHIP	75	5%	1/10W
R201	1-216-113-00	RES, CHIP	470K	5%	1/10W
R202	1-216-113-00	RES, CHIP	470K	5%	1/10W
R203	1-216-025-91	RES, CHIP	100	5%	1/10W
R204	1-216-043-91	RES, CHIP	560	5%	1/10W
R205	1-216-043-91	RES, CHIP	560	5%	1/10W
R207	1-216-025-91	RES, CHIP	100	5%	1/10W
R211		VARIANT (SEE VARIANT PARTS LIST)			
R212		VARIANT (SEE VARIANT PARTS LIST)			
R213	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R214	1-216-113-00	RES, CHIP	470K	5%	1/10W
R215	1-216-033-00	RES, CHIP	220	5%	1/10W
R216	1-216-113-00	RES, CHIP	470K	5%	1/10W
R217	1-216-033-00	RES, CHIP	220	5%	1/10W
R218	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R219	1-216-073-00	RES, CHIP	10K	5%	1/10W
R220	1-216-073-00	RES, CHIP	10K	5%	1/10W
R221	1-216-073-00	RES, CHIP	10K	5%	1/10W
R222	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R223	1-216-073-00	RES, CHIP	10K	5%	1/10W
R224	1-216-073-00	RES, CHIP	10K	5%	1/10W
R225	1-216-073-00	RES, CHIP	10K	5%	1/10W
R226	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R227	1-216-097-91	RES, CHIP	100K	5%	1/10W
R228	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R229	1-216-097-91	RES, CHIP	100K	5%	1/10W
R231		VARIANT (SEE VARIANT PARTS LIST)			
R232		VARIANT (SEE VARIANT PARTS LIST)			
R233		VARIANT (SEE VARIANT PARTS LIST)			
R236		VARIANT (SEE VARIANT PARTS LIST)			
R241	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R242	1-216-083-00	RES, CHIP	27K	5%	1/10W
R243	1-216-689-11	RES, CHIP	39K	5%	1/10W
R244	1-216-049-91	RES, CHIP	1K	5%	1/10W
R245	1-216-049-91	RES, CHIP	1K	5%	1/10W
R248	1-216-049-91	RES, CHIP	1K	5%	1/10W
R250	1-216-033-00	RES, CHIP	220	5%	1/10W
R252	1-216-033-00	RES, CHIP	220	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R253	1-215-899-11	METAL	15K	5%	2W
R254	1-216-033-00	RES, CHIP	220	5%	1/10W
R255		VARIANT (SEE VARIANT PARTS LIST)			
R256	1-216-033-00	RES, CHIP	220	5%	1/10W
R257	1-216-073-00	RES, CHIP	10K	5%	1/10W
R258	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R259	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R260	1-216-025-91	RES, CHIP	100	5%	1/10W
R261	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R262	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R263	1-216-033-00	RES, CHIP	220	5%	1/10W
R264	1-216-033-00	RES, CHIP	220	5%	1/10W
R265	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R266	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R267	1-216-022-00	RES, CHIP	75	5%	1/10W
R269	1-216-049-91	RES, CHIP	1K	5%	1/10W
R270	1-216-022-00	RES, CHIP	75	5%	1/10W
R271	1-216-113-00	RES, CHIP	470K	5%	1/10W
R272	1-216-113-00	RES, CHIP	470K	5%	1/10W
R273	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R274	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R275	1-216-295-91	SHORT			
R276	1-216-295-91	SHORT			
R277	1-216-295-91	SHORT			
R278		VARIANT (SEE VARIANT PARTS LIST)			
R279	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R280		VARIANT (SEE VARIANT PARTS LIST)			
R281		VARIANT (SEE VARIANT PARTS LIST)			
R282		VARIANT (SEE VARIANT PARTS LIST)			
R283		VARIANT (SEE VARIANT PARTS LIST)			
R284		VARIANT (SEE VARIANT PARTS LIST)			
R285		VARIANT (SEE VARIANT PARTS LIST)			
R286		VARIANT (SEE VARIANT PARTS LIST)			
R287		VARIANT (SEE VARIANT PARTS LIST)			
R288		VARIANT (SEE VARIANT PARTS LIST)			
R289		VARIANT (SEE VARIANT PARTS LIST)			
R290		VARIANT (SEE VARIANT PARTS LIST)			
R291		VARIANT (SEE VARIANT PARTS LIST)			
R292		VARIANT (SEE VARIANT PARTS LIST)			
R293		VARIANT (SEE VARIANT PARTS LIST)			
R294		VARIANT (SEE VARIANT PARTS LIST)			
R295		VARIANT (SEE VARIANT PARTS LIST)			
R296	1-249-437-11	CARBON	47K	5%	1/4W
R297	1-216-043-91	RES, CHIP	560	5%	1/10W
R298	1-216-041-00	RES, CHIP	470	5%	1/10W
R299	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R301	1-216-295-91	SHORT			
R304	1-216-073-00	RES, CHIP	10K	5%	1/10W
R305	1-216-033-00	RES, CHIP	220	5%	1/10W
R306	1-208-806-11	RES, CHIP	10K	0.50%	1/10W
R307	1-216-071-00	RES, CHIP	8.2K	5%	1/10W
R308	1-216-025-91	RES, CHIP	100	5%	1/10W
R310	1-216-049-91	RES, CHIP	1K	5%	1/10W
R312	1-216-033-00	RES, CHIP	220	5%	1/10W
R313	1-216-033-00	RES, CHIP	220	5%	1/10W

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

COMMON PARTS LISTING A

REF.NO.	PART NO.	DESCRIPTION			REMARK
R314	1-216-033-00	RES, CHIP	220	5%	1/10W
R315	1-216-033-00	RES, CHIP	220	5%	1/10W
R316	1-247-807-31	CARBON	100	5%	1/4W
R317	1-216-025-91	RES, CHIP	100	5%	1/10W
R318	1-216-025-91	RES, CHIP	100	5%	1/10W
R319	1-216-073-00	RES, CHIP	10K	5%	1/10W
R320	1-216-025-91	RES, CHIP	100	5%	1/10W
R321	1-216-025-91	RES, CHIP	100	5%	1/10W
R322	1-216-025-91	RES, CHIP	100	5%	1/10W
R323	1-216-037-00	RES, CHIP	330	5%	1/10W
R324	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R325	1-216-022-00	RES, CHIP	75	5%	1/10W
R326	1-216-033-00	RES, CHIP	220	5%	1/10W
R328	1-216-025-91	RES, CHIP	100	5%	1/10W
R329	1-216-025-91	RES, CHIP	100	5%	1/10W
R330	1-216-025-91	RES, CHIP	100	5%	1/10W
R331	1-216-025-91	RES, CHIP	100	5%	1/10W
R333	1-216-049-91	RES, CHIP	1K	5%	1/10W
R334	1-216-025-91	RES, CHIP	100	5%	1/10W
R335	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R336	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R337	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R339	1-216-295-91	SHORT			
R340	1-249-417-11	CARBON	1K	5%	1/4W
R341	1-216-073-00	RES, CHIP	10K	5%	1/10W
R342	1-216-069-00	RES, CHIP	6.8K	5%	1/10W
R343	1-216-129-00	RES, CHIP	2.2M	5%	1/10W
R344	1-216-295-91	SHORT			
R345	1-216-129-00	RES, CHIP	2.2M	5%	1/10W
R346	1-216-129-00	RES, CHIP	2.2M	5%	1/10W
R347	1-216-049-91	RES, CHIP	1K	5%	1/10W
R348	1-216-043-91	RES, CHIP	560	5%	1/10W
R349	1-216-069-00	RES, CHIP	6.8K	5%	1/10W
R350	1-208-766-11	RES, CHIP	220	0.50%	1/10W
R351	1-208-766-11	RES, CHIP	220	0.50%	1/10W
R352	1-208-794-11	RES, CHIP	3.3K	0.50%	1/10W
R353	1-216-295-91	SHORT			
R354	1-208-794-11	RES, CHIP	3.3K	0.50%	1/10W
R355	1-216-295-91	SHORT			
R356	1-216-059-00	RES, CHIP	2.7K	5%	1/10W
R357	1-216-091-00	RES, CHIP	56K	5%	1/10W
R358	1-216-043-91	RES, CHIP	560	5%	1/10W
R359	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R360	1-216-049-91	RES, CHIP	1K	5%	1/10W
R361	1-216-049-91	RES, CHIP	1K	5%	1/10W
R362	1-216-043-91	RES, CHIP	560	5%	1/10W
R363	1-216-037-00	RES, CHIP	330	5%	1/10W
R364	1-216-025-91	RES, CHIP	100	5%	1/10W
R365	1-216-025-91	RES, CHIP	100	5%	1/10W
R366	1-216-053-00	RES, CHIP	1.5K	5%	1/10W
R367	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R368	1-216-033-00	RES, CHIP	220	5%	1/10W
R369	1-216-041-00	RES, CHIP	470	5%	1/10W
R370	1-216-033-00	RES, CHIP	220	5%	1/10W
R372	1-216-035-00	RES, CHIP	270	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R373	1-216-025-91	RES, CHIP	100	5%	1/10W
R374	1-216-025-91	RES, CHIP	100	5%	1/10W
R375	1-216-053-00	RES, CHIP	1.5K	5%	1/10W
R376	1-216-049-91	RES, CHIP	1K	5%	1/10W
R377	1-216-049-91	RES, CHIP	1K	5%	1/10W
R378	1-216-033-00	RES, CHIP	220	5%	1/10W
R379	1-216-049-91	RES, CHIP	1K	5%	1/10W
R380	1-208-790-11	RES, CHIP	2.2K	0.50%	1/10W
R381	1-216-053-00	RES, CHIP	1.5K	5%	1/10W
R383	1-216-017-91	RES, CHIP	47	5%	1/10W
R384	1-216-097-91	RES, CHIP	100K	5%	1/10W
R385	1-216-073-00	RES, CHIP	10K	5%	1/10W
R386	1-216-061-00	RES, CHIP	3.3K	5%	1/10W
R387	1-216-067-00	RES, CHIP	5.6K	5%	1/10W
R390		VARIANT (SEE VARIANT PARTS LIST)			
R391		VARIANT (SEE VARIANT PARTS LIST)			
R392		VARIANT (SEE VARIANT PARTS LIST)			
R394		VARIANT (SEE VARIANT PARTS LIST)			
R395		VARIANT (SEE VARIANT PARTS LIST)			
R399	1-216-295-91	SHORT			
R400		VARIANT (SEE VARIANT PARTS LIST)			
R402	1-216-121-91	RES, CHIP	1M	5%	1/10W
R403	1-216-033-00	RES, CHIP	220	5%	1/10W
R404	1-216-033-00	RES, CHIP	220	5%	1/10W
R407		VARIANT (SEE VARIANT PARTS LIST)			
R432		VARIANT (SEE VARIANT PARTS LIST)			
R450		VARIANT (SEE VARIANT PARTS LIST)			
R451		VARIANT (SEE VARIANT PARTS LIST)			
R502⚠	1-215-892-11	METAL	1K	5%	2W
R503⚠	1-249-426-11	CARBON	5.6K	5%	1/4W
R504⚠	1-216-349-00	METAL	1	5%	1W
R505	1-249-401-11	CARBON	47	5%	1/4W
R506	1-215-860-11	METAL	33	5%	1W
R507⚠	1-260-097-11	CARBON	680	5%	1/2W
R508⚠	1-216-449-11	METAL	56	5%	2W
R509⚠	1-216-481-11	METAL	1.2K	5%	3W
R510⚠	1-216-449-11	METAL	56	5%	2W
R511	1-247-843-11	CARBON	3.3K	5%	1/4W
R520⚠	1-215-861-00	METAL	47	5%	1W
R521	1-249-411-11	CARBON	330	5%	1/4W
R522	1-249-415-11	CARBON	680	5%	1/4W
R523	1-216-073-00	RES, CHIP	10K	5%	1/10W
R524	1-249-429-11	CARBON	10K	5%	1/4W
R525	1-249-427-11	CARBON	6.8K	5%	1/4W
R526	1-216-081-00	RES, CHIP	22K	5%	1/10W
R527	1-216-079-00	RES, CHIP	18K	5%	1/10W
R528	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R529	1-216-101-00	RES, CHIP	150K	5%	1/10W
R530	1-216-089-91	RES, CHIP	47K	5%	1/10W
R532	1-215-437-00	METAL	4.7K	1%	1/4W
R533	1-215-461-00	METAL	47K	1%	1/4W
R534	1-215-451-00	METAL	18K	1%	1/4W
R535	1-249-441-11	CARBON	100K	5%	1/4W
R541	1-249-430-11	CARBON	12K	5%	1/4W

A COMMON PARTS LISTING

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

The components identified by ⋈ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

REF.NO.	PART NO.	DESCRIPTION			REMARK
R542	1-249-429-11	CARBON	10K	5%	1/4W
R543	1-249-429-11	CARBON	10K	5%	1/4W
R544⚠	1-216-351-00	METAL	1.5	5%	1W
R546⚠	1-215-890-11	METAL	470	5%	2W
R547⚠	1-249-385-11	CARBON	2.2	5%	1/4W
R548	1-249-430-11	CARBON	12K	5%	1/4W
R549	1-249-429-11	CARBON	10K	5%	1/4W
R550	1-216-061-00	RES, CHIP	3.3K	5%	1/10W
R551	1-249-413-11	CARBON	470	5%	1/4W
R552	1-247-887-00	CARBON	220K	5%	1/4W
R553⚠	1-260-312-11	CARBON	47	5%	1/2W
R554	1-216-101-00	RES, CHIP	150K	5%	1/10W
R555	1-216-093-91	RES, CHIP	68K	5%	1/10W
R556	1-216-081-00	RES, CHIP	22K	5%	1/10W
R557	1-249-431-11	CARBON	15K	5%	1/4W
R558	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R559	1-216-121-91	RES, CHIP	1M	5%	1/10W
R561⚠	1-249-377-11	CARBON	0.47	5%	1/4W
R562⚠	1-260-288-11	CARBON	0.47	5%	1/2W
R571⚠	1-216-365-00	METAL	0.47	5%	2W
R572⚠	1-249-429-11	CARBON	10K	5%	1/4W
R573⚠	1-247-895-91	CARBON	470K	5%	1/4W
R574⚠	1-249-416-11	CARBON	820	5%	1/4W
R575⚠	1-247-895-91	CARBON	470K	5%	1/4W
R576⚠	1-249-441-11	CARBON	100K	5%	1/4W
R578⚠	1-215-902-11	METAL	47K	5%	1W
R579	1-208-777-11	RES, CHIP	620	0.50%	1/10W
R580	1-215-469-00	METAL	100K	1%	1/4W
R581	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R582⚠	1-208-806-11	RES, CHIP	10K	0.50%	1/10W
R583⚠	1-208-830-11	RES, CHIP	100K	0.50%	1/10W
⋈ R584⚠	1-208-822-11	RES, CHIP	47K	0.50%	1/10W
R585	1-216-073-00	RES, CHIP	10K	5%	1/10W
R586⚠	1-216-073-00	RES, CHIP	10K	5%	1/10W
R587	1-216-073-00	RES, CHIP	10K	5%	1/10W
R591⚠	1-215-882-00	METAL	22	5%	2W
R607	1-215-859-00	METAL	22	5%	1W
R625	1-249-440-11	CARBON	82K	5%	1/4W
R626	1-249-417-11	CARBON	1K	5%	1/4W
R627	1-240-251-11	CMT,MELF	6.8	5%	10W
R628	1-249-441-11	CARBON	100K	5%	1/4W
R629	1-260-324-11	CARBON	470	5%	1/2W
R630	1-249-429-11	CARBON	10K	5%	1/4W
R631	1-249-437-11	CARBON	47K	5%	1/4W
R632⚠	1-202-933-61	FUSIBLE	0.1	10%	1/2W
R633		VARIANT (SEE VARIANT PARTS LIST)			
R634	1-249-437-11	CARBON	47K	5%	1/4W
R636	1-249-421-11	CARBON	2.2K	5%	1/4W
R637		VARIANT (SEE VARIANT PARTS LIST)			
R638		VARIANT (SEE VARIANT PARTS LIST)			
R639	1-216-361-21	METAL	0.22	5%	2W
R640	1-249-415-11	CARBON	680	5%	1/4W
R641⚠	1-216-387-11	METAL	0.68	5%	3W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R642	1-249-437-11	CARBON	47K	5%	1/4W
R643	1-215-857-11	METAL	10	5%	1W
R645	1-249-429-11	CARBON	10K	5%	1/4W
R646	1-216-485-11	METAL	5.6K	5%	3W
R647	1-249-421-11	CARBON	2.2K	5%	1/4W
R649	1-249-417-11	CARBON	1K	5%	1/4W
R650	1-249-415-11	CARBON	680	5%	1/4W
R651	1-249-419-11	CARBON	1.5K	5%	1/4W
R652	1-247-843-11	CARBON	3.3K	5%	1/4W
R653⚠	1-215-898-11	METAL	10K	5%	2W
R654	1-249-419-11	CARBON	1.5K	5%	1/4W
R656		VARIANT (SEE VARIANT PARTS LIST)			
R657	1-249-417-11	CARBON	1K	5%	1/4W
R658	1-249-421-11	CARBON	2.2K	5%	1/4W
R659	1-216-362-11	METAL	0.27	5%	2W
R660	1-249-429-11	CARBON	10K	5%	1/4W
R662	1-1249-417-11	CARBON	1K	5%	1/4W
R664	1-249-417-11	CARBON	1K	5%	1/4W
R665	1-249-429-11	CARBON	10K	5%	1/4W
R672	1-216-485-11	METAL	5.6K	5%	3W
R673	1-249-421-11	CARBON	2.2K	5%	1/4W
R674	1-247-863-91	CARBON	22K	5%	1/4W
R675⚠	1-216-387-11	METAL	0.68	5%	3W
R676	1-216-485-11	METAL	5.6K	5%	3W

RELAY

RY602⚠	1-755-266-11	RELAY, AC POWER
RY603⚠	1-755-018-11	RELAY

SWITCH

S001		VARIANT (SEE VARIANT PARTS LIST)
S002		VARIANT (SEE VARIANT PARTS LIST)
S003		VARIANT (SEE VARIANT PARTS LIST)
S004		VARIANT (SEE VARIANT PARTS LIST)
S005		VARIANT (SEE VARIANT PARTS LIST)
S006		VARIANT (SEE VARIANT PARTS LIST)
S007		VARIANT (SEE VARIANT PARTS LIST)

SWITCH

SW501	1-572-707-11	SWITCH, LEVER

TRANSFORMER

T501	1-437-210-11	TRANSFORMER, HORIZONTAL DRIVE
T502	1-431-731-11	TRANSFORMER, MODULATION
T504⚠	1-453-268-21	TRANSFORMER, FBT ASSY, NX-4005//X4J4
T603		VARIANT (SEE VARIANT PARTS LIST)

REF.NO.	PART NO.	DESCRIPTION	REMARK
	THERMISTOR		
THP601		VARIANT (SEE VARIANT PARTS LIST)	
THP602		VARIANT (SEE VARIANT PARTS LIST)	
	TUNER		
TU101	8-598-431-00	TUNER, FSS BTF-WA411	
	CRYSTAL		
X001	1-767-487-11	VIBRATOR, CRYSTAL	
X301	1-567-505-11	OSCILLATOR CRYSTAL	

REF.NO.	PART NO.	DESCRIPTION	REMARK

A BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

KV-27S42

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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A BOARD VARIANT LIST: KV-27S42

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C216	1-126-959-11	ELECT	0.47µF	50V	20%
C217	1-126-959-11	ELECT	0.47µF	50V	20%
C380	1-163-021-91	CERAMIC	0.01µF	50V	10%
C381	1-163-021-91	CERAMIC	0.01µF	50V	10%
C382	1-163-021-91	CERAMIC	0.01µF	50V	10%
C418	1-126-964-11	ELECT	10µF	50V	20%
C613⚠	1-128-717-11	ELECT	680µF	250V	20%
C615	1-113-920-11	CERAMIC	0.0022µF	250V	20%

CONNECTOR

CN301	1-564-508-11	PLUG, CONNECTOR		5P	

DIODE

D002	8-719-070-80	DIODE LNK0120022G			
D208	8-719-110-17	DIODE RD10ESB2			
D403	8-719-991-33	DIODE 1SS133T-77			

IC

IC004	8-742-014-11	HYB IC SBX1981-51			
IC203	8-759-366-77	IC MM1311AD			
IC401	8-759-490-17	IC TDA7057AQ/N2			
IC601⚠	8-749-015-61	IC STR-F6626			

IC LINK

PS201⚠	1-532-984-11	LINK, IC	2A/90V		

RESISTOR

R020	1-216-069-00	RES,CHIP	6.8K	1/10W	5%
R021	1-249-415-11	CARBON	680	1/4W	5%
R022	1-249-416-11	CARBON	820	1/4W	5%
R023	1-216-057-00	RES,CHIP	2.2K	1/10W	5%
R065	1-216-295-91	SHORT			
R090	1-249-429-11	CARBON	10K	1/4W	5%
R211	1-247-807-31	CARBON	100	1/4W	5%
R212	1-216-065-91	RES,CHIP	4.7K	1/10W	5%
R231	1-249-421-11	CARBON	2.2K	1/4W	5%
R232	1-249-429-11	CARBON	10K	1/4W	5%
R233	1-249-429-11	CARBON	10K	1/4W	5%
R236	1-249-421-11	CARBON	2.2K	1/4W	5%
R400	1-216-081-00	RES,CHIP	22K	1/10W	5%
R407	1-216-295-91	SHORT			
R432	1-249-428-11	CARBON	8.2K	1/4W	5%
R633	1-215-483-00	METAL	390K	1/4W	1%
R656	1-249-399-11	CARBON	33	1/4W	5%

SWITCH

S001	1-692-431-21	SWITCH, TACTILE			
S002	1-692-431-21	SWITCH, TACTILE			
S003	1-692-431-21	SWITCH, TACTILE			
S004	1-692-431-21	SWITCH, TACTILE			
S005	1-692-431-21	SWITCH, TACTILE			
S006	1-692-431-21	SWITCH, TACTILE			
S007	1-692-431-21	SWITCH, TACTILE			

TRANSFORMER

T603⚠	1-433-806-11	TRANSFORMER, REGULATOR			

THERMISTOR

THP602⚠	1-809-539-11	THERMISTOR, POSITIVE			

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A BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

KV-29SL42/29SL42C/29XL42M

A BOARD VARIANT LIST: KV-29SL42/29SL42C/29XL42M

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C216	1-126-959-11	ELECT	0.47µF	20%	50V
C217	1-126-959-11	ELECT	0.47µF	20%	50V
C380	1-163-021-91	CERAMIC	0.01µF	10%	50V
C381	1-163-021-91	CERAMIC	0.01µF	10%	50V
C382	1-163-021-91	CERAMIC	0.01µF	10%	50V
C418	1-126-964-11	ELECT	10µF	20%	50V
C613⚠	1-128-718-11	ELECT	560µF	20%	400V
C615	1-113-924-11	CERAMIC	0.0047µF	20%	250V
C616	1-130-202-00	FILM	0.022µF	10%	400V
C617	1-107-824-11	CERAMIC	220pF	5%	1KV
C699	1-113-924-11	CERAMIC	0.0047µF	20%	250V

CONNECTOR

CN301	1-564-508-11	PLUG, CONNECTOR	5P

DIODE

D002	8-719-070-80	DIODE LNK0120022G
D208	8-719-110-17	DIODE RD10ESB2
D403	8-719-991-33	DIODE 1SS133T-77
D609	8-719-311-31	DIODE RU-1P

IC

IC004	8-742-014-11	HYB IC SBX1981-51
IC203	8-759-366-77	IC MM1311AD
IC401	8-759-490-17	IC TDA7057AQ/N2
IC601⚠	8-749-014-48	IC STR-F6656

IC LINK

PS201⚠	1-532-984-11	LINK, IC	2A/90V		

RESISTOR

R020	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R021	1-249-415-11	CARBON	680	5%	1/4W
R022	1-249-416-11	CARBON	820	5%	1/4W
R023	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R065	1-216-295-91	SHORT			
R090	1-249-429-11	CARBON	10K	5%	1/4W
R211	1-247-807-31	CARBON	100	5%	1/4W
R212	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R231	1-249-421-11	CARBON	2.2K	5%	1/4W
R232	1-249-429-11	CARBON	10K	5%	1/4W
R233	1-249-429-11	CARBON	10K	5%	1/4W
R236	1-249-421-11	CARBON	2.2K	5%	1/4W
R400	1-216-081-00	RES,CHIP	22K	5%	1/10W
R407	1-216-295-91	SHORT			
R432	1-249-428-11	CARBON	8.2K	5%	1/4W
R633	1-215-479-00	METAL	270K	1%	1/4W
R637	1-215-929-11	METAL	100K	5%	3W
R638	1-215-479-00	METAL	270K	1%	1/4W
R656	1-249-402-11	CARBON	56	5%	1/4W

SWITCH

S001	1-692-431-21	SWITCH, TACTILE
S002	1-692-431-21	SWITCH, TACTILE
S003	1-692-431-21	SWITCH, TACTILE
S004	1-692-431-21	SWITCH, TACTILE
S005	1-692-431-21	SWITCH, TACTILE
S006	1-692-431-21	SWITCH, TACTILE
S007	1-692-431-21	SWITCH, TACTILE

TRANSFORMER

T603⚠	1-433-807-11	TRANSFORMER, REGULATOR

THERMISTOR

THP601⚠	1-803-540-11	THERMISTOR

A BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

KV-27S46

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

A BOARD VARIANT LIST: KV-27S46

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C216	1-126-959-11	ELECT	0.47µF	20%	50V
C217	1-126-959-11	ELECT	0.47µF	20%	50V
C370	1-163-021-91	CERAMIC	0.01µF	10%	50V
C371	1-163-021-91	CERAMIC	0.01µF	10%	50V
C372	1-163-021-91	CERAMIC	0.01µF	10%	50V
C418	1-126-964-11	ELECT	10µF	20%	50V
C613⚠	1-128-717-11	ELECT	680µF	20%	250V
C615	1-113-920-11	CERAMIC	0.0022µF	20%	250V

CONNECTOR

CN301	1-564-508-11	PLUG, CONNECTOR		5P	
CN302	1-691-616-11	CONNECTOR, BOARD TO BOARD			

DIODE

D002	8-719-070-80	DIODE LNK0120022G
D208	8-719-110-17	DIODE RD10ESB2
D403	8-719-991-33	DIODE 1SS133T-77

IC

IC004	8-742-014-11	HYB IC SBX1981-51
IC203	8-759-534-81	IC MM1313AD/
IC401	8-759-490-17	IC TDA7057AQ/N2
IC601⚠	8-749-015-61	IC STR-F6626

JACK

J202	1-774-749-11	JACK BLOCK, PIN

IC LINK

PS201⚠	1-532-984-11	LINK, IC	2A/90V		

RESISTOR

R020	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R021	1-249-415-11	CARBON	680	5%	1/4W
R022	1-249-416-11	CARBON	820	5%	1/4W
R023	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R065	1-216-295-91	SHORT			
R090	1-249-429-11	CARBON	10K	5%	1/4W
R211	1-247-807-31	CARBON	100	5%	1/4W
R212	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R231	1-249-421-11	CARBON	2.2K	5%	1/4W
R232	1-249-429-11	CARBON	10K	5%	1/4W
R233	1-249-429-11	CARBON	10K	5%	1/4W
R236	1-249-421-11	CARBON	2.2K	5%	1/4W
R283	1-216-295-91	SHORT			
R400	1-216-081-00	RES,CHIP	22K	5%	1/10W
R432	1-249-428-11	CARBON	8.2K	5%	1/4W
R633	1-215-483-00	METAL	390K	1%	1/4W
R656	1-249-399-11	CARBON	33	5%	1/4W

SWITCH

S001	1-692-431-21	SWITCH, TACTILE
S002	1-692-431-21	SWITCH, TACTILE
S003	1-692-431-21	SWITCH, TACTILE
S004	1-692-431-21	SWITCH, TACTILE
S005	1-692-431-21	SWITCH, TACTILE
S006	1-692-431-21	SWITCH, TACTILE
S007	1-692-431-21	SWITCH, TACTILE

TRANSFORMER

T603⚠	1-433-806-11	TRANSFORMER, REGULATOR

THERMISTOR

THP602⚠	1-809-539-11	THERMISTOR, POSITIVE

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

A BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

KV-29SL46

A BOARD VARIANT LIST: KV-29SL46

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C216	1-126-959-11	ELECT	0.47µF	20%	50V
C217	1-126-959-11	ELECT	0.47µF	20%	50V
C370	1-163-021-91	CERAMIC	0.01µF	10%	50V
C371	1-163-021-91	CERAMIC	0.01µF	10%	50V
C372	1-163-021-91	CERAMIC	0.01µF	10%	50V
C418	1-126-964-11	ELECT	10µF	20%	50V
C613⚠	1-128-718-11	ELECT	560µF	20%	400V
C615	1-113-924-11	CERAMIC	0.0047µF	20%	250V
C616	1-130-202-00	FILM	0.022µF	10%	400V
C617	1-107-824-11	CERAMIC	220pF	5%	1KV
C699	1-113-924-11	CERAMIC	0.0047µF	20%	250V

CONNECTOR

CN301	1-564-508-11	PLUG, CONNECTOR	5P

DIODE

D002	8-719-070-80	DIODE LNK0120022G
D208	8-719-110-17	DIODE RD10ESB2
D403	8-719-991-33	DIODE 1SS133T-77
D609	8-719-311-31	DIODE RU-1P

IC

IC004	8-742-014-11	HYB IC SBX1981-51
IC203	8-759-534-81	IC MM1313AD/
IC401	8-759-490-17	IC TDA7057AQ/N2
IC601⚠	8-749-014-48	IC STR-F6656

JACK

J202	1-774-749-11	JACK BLOCK,	PIN

IC LINK

PS201⚠	1-532-984-11	LINK, IC	2A/90V

RESISTOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
R020	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R021	1-249-415-11	CARBON	680	5%	1/4W
R022	1-249-416-11	CARBON	820	5%	1/4W
R023	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R065	1-216-295-91	SHORT			
R090	1-249-429-11	CARBON	10K	5%	1/4W
R211	1-247-807-31	CARBON	100	5%	1/4W
R212	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R231	1-249-421-11	CARBON	2.2K	5%	1/4W
R232	1-249-429-11	CARBON	10K	5%	1/4W
R233	1-249-429-11	CARBON	10K	5%	1/4W
R236	1-249-421-11	CARBON	2.2K	5%	1/4W
R283	1-216-295-91	SHORT			
R400	1-216-081-00	RES,CHIP	22K	5%	1/10W
R432	1-249-428-11	CARBON	8.2K	5%	1/4W
R633	1-215-479-00	METAL	270K	1%	1/4W
R637	1-215-929-11	METAL	100K	5%	3W
R638	1-215-479-00	METAL	270K	1%	1/4W
R656	1-249-402-11	CARBON	56	5%	1/4W

SWITCH

S001	1-692-431-21	SWITCH, TACTILE
S002	1-692-431-21	SWITCH, TACTILE
S003	1-692-431-21	SWITCH, TACTILE
S004	1-692-431-21	SWITCH, TACTILE
S005	1-692-431-21	SWITCH, TACTILE
S006	1-692-431-21	SWITCH, TACTILE
S007	1-692-431-21	SWITCH, TACTILE

TRANSFORMER

T603⚠	1-433-807-11	TRANSFORMER, REGULATOR

THERMISTOR

THP601⚠	1-803-540-11	THERMISTOR

A BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

KV-27S66

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

A BOARD VARIANT LIST: KV-27S66

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C216	1-126-959-11	ELECT	0.47µF	20%	50V
C217	1-126-959-11	ELECT	0.47µF	20%	50V
C250	1-126-960-11	ELECT	1µF	20%	50V
C251	1-126-960-11	ELECT	1µF	20%	50V
C252	1-126-959-11	ELECT	0.47µF	20%	50V
C370	1-163-021-91	CERAMIC	0.01µF	10%	50V
C371	1-163-021-91	CERAMIC	0.01µF	10%	50V
C372	1-163-021-91	CERAMIC	0.01µF	10%	50V
C418	1-126-964-11	ELECT	10µF	20%	50V
C613⚠	1-128-717-11	ELECT	680µF	20%	250V
C615	1-113-920-11	CERAMIC	0.0022µF	20%	250V
C627	1-164-004-11	CERAMIC	10%µF	10%	25V

CONNECTOR

CN150	1-691-616-21	CONNECTOR, BOARD TO BOARD	15P
CN301	1-564-508-11	PLUG, CONNECTOR	5P
CN302	1-691-616-11	CONNECTOR, BOARD TO BOARD	

DIODE

D002	8-719-070-80	DIODE LNK0120022G
D208	8-719-110-17	DIODE RD10ESB2
D403	8-719-991-33	DIODE 1SS133T-77

IC

IC004	8-742-014-11	HYB IC SBX1981-51
IC203	8-759-534-81	IC MM1313AD/
IC401	8-759-490-17	IC TDA7057AQ/N2
IC601⚠	8-749-015-61	IC STR-F6626

JACK

J202	1-774-749-11	JACK BLOCK, PIN

IC LINK

PS201⚠	1-532-984-11	LINK, IC	2A/90V

RESISTOR

R020	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R021	1-249-415-11	CARBON	680	5%	1/4W
R022	1-249-416-11	CARBON	820	5%	1/4W
R023	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R065	1-216-295-91	SHORT			
R090	1-249-429-11	CARBON	10K	5%	1/4W
R211	1-247-807-31	CARBON	100	5%	1/4W
R212	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R231	1-249-421-11	CARBON	2.2K	5%	1/4W
R232	1-249-429-11	CARBON	10K	5%	1/4W
R233	1-249-429-11	CARBON	10K	5%	1/4W
R236	1-249-421-11	CARBON	2.2K	5%	1/4W
R278	1-216-295-91	SHORT			
R283	1-216-295-91	SHORT			
R400	1-216-081-00	RES,CHIP	22K	5%	1/10W
R432	1-249-428-11	CARBON	8.2K	5%	1/4W
R633	1-215-483-00	METAL	390K	1%	1/4W
R656	1-249-399-11	CARBON	33	5%	1/4W

SWITCH

S001	1-692-431-21	SWITCH, TACTILE
S002	1-692-431-21	SWITCH, TACTILE
S003	1-692-431-21	SWITCH, TACTILE
S004	1-692-431-21	SWITCH, TACTILE
S005	1-692-431-21	SWITCH, TACTILE
S006	1-692-431-21	SWITCH, TACTILE
S007	1-692-431-21	SWITCH, TACTILE

TRANSFORMER

T603⚠	1-433-806-11	TRANSFORMER, REGULATOR

THERMISTOR

THP602⚠	1-809-539-11	THERMISTOR, POSITIVE

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

A BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

KV-29AL42/29AL42C

A BOARD VARIANT LIST: KV-29AL42/29AL42C

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C380	1-163-021-91	CERAMIC	0.01µF	10%	50V
C381	1-163-021-91	CERAMIC	0.01µF	10%	50V
C382	1-163-021-91	CERAMIC	0.01µF	10%	50V
C613⚠	1-128-718-11	ELECT	560µF	20%	400V
C615	1-113-924-11	CERAMIC	0.0047µF	20%	250V
C616	1-130-202-00	FILM	0.022µF	10%	400V
C617	1-107-824-11	CERAMIC	220pF	5%	1KV
C699	1-113-924-11	CERAMIC	0.0047µF	20%	250V

CONNECTOR

CN251	1-564-510-11	PLUG, CONNECTOR	7P	
CN253	1-564-510-11	PLUG, CONNECTOR	7P	
CN301	1-564-511-11	PLUG, CONNECTOR	8P	

DIODE

D208	8-719-982-96	DIODE MTZJ-T-77-2.2A
D609	8-719-311-31	DIODE RU-1P

IC

IC203	8-759-366-77	IC MM1311AD
IC601⚠	8-749-014-48	IC STR-F6656

TRANSISTOR

Q390	8-729-422-27	TRANSISTOR 2SD601A-Q
Q391	8-729-422-27	TRANSISTOR 2SD601A-Q

RESISTOR

R255	1-216-022-00	RES,CHIP	75	5%	1/10W
R390	1-249-417-11	CARBON	1K	5%	1/4W
R391⚠	1-216-073-00	RES,CHIP	10K	5%	1/10W
R392	1-216-049-91	RES,CHIP	1K	5%	1/10W
R394	1-216-033-00	RES,CHIP	220	5%	1/10W
R395	1-216-049-91	RES,CHIP	1K	5%	1/10W
R407	1-216-295-91	SHORT			
R450	1-216-295-91	SHORT			
R451	1-216-295-91	SHORT			
R633	1-215-479-00	METAL	270K	1%	1/4W
R637	1-215-929-11	METAL	100K	5%	3W
R638	1-215-479-00	METAL	270K	1%	1/4W
R656	1-249-402-11	CARBON	56	5%	1/4W

REF.NO.	PART NO.	DESCRIPTION	REMARK

TRANSFORMER

T603⚠	1-433-807-11	TRANSFORMER, REGULATOR	

THERMISTOR

THP601⚠	1-803-540-11	THERMISTOR	

A BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

KV-29AL66/29AL66C

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

A BOARD VARIANT LIST: KV-29AL66/29AL66C

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C250	1-126-960-11	ELECT	1µF	20%	50V
C251	1-126-960-11	ELECT	1µF	20%	50V
C252	1-126-959-11	ELECT	0.47µF	20%	50V
C280	1-126-935-11	ELECT	470µF	20%	16V
C281	1-126-959-11	ELECT	0.47µF	20%	50V
C282	1-126-959-11	ELECT	0.47µF	20%	50V
C370	1-163-021-91	CERAMIC	0.01µF	10%	50V
C371	1-163-021-91	CERAMIC	0.01µF	10%	50V
C372	1-163-021-91	CERAMIC	0.01µF	10%	50V
C613⚠	1-128-718-11	ELECT	560µF	20%	400V
C615	1-113-924-11	CERAMIC	0.0047µF	20%	250V
C616	1-130-202-00	FILM	0.022µF	10%	400V
C617	1-107-824-11	CERAMIC	220pF	5%	1KV
C627	1-164-004-11	CERAMIC	0.1µF	10%	25V
C699	1-113-924-11	CERAMIC	0.0047µF	20%	250V

CONNECTOR

CN151	1-564-511-11	PLUG, CONNECTOR	8P
CN152	1-564-509-11	PLUG, CONNECTOR	6P
CN251	1-564-510-11	PLUG, CONNECTOR	7P
CN253	1-564-510-11	PLUG, CONNECTOR	7P
CN301	1-564-511-11	PLUG, CONNECTOR	8P
CN302	1-691-616-11	CONNECTOR, BOARD TO BOARD	

DIODE

D208	8-719-982-96	DIODE MTZJ-T-77-2.2A
D280	8-719-981-99	DIODE MTZJ-3.3
D281	8-719-981-99	DIODE MTZJ-3.3
D609	8-719-311-31	DIODE RU-1P

IC

IC203	8-759-534-81	IC MM1313AD/
IC601⚠	8-749-014-48	IC STR-F6656

JACK

J202	1-774-749-11	JACK BLOCK, PIN
J204	1-774-749-11	JACK BLOCK, PIN

TRANSISTOR

Q080	8-729-422-27	TRANSISTOR 2SD601A-Q
Q280	8-729-216-22	TRANSISTOR 2SA1162-G
Q281	8-729-216-22	TRANSISTOR 2SA1162-G
Q282	8-729-216-22	TRANSISTOR 2SA1162-G
Q283	8-729-422-27	TRANSISTOR 2SD601A-Q
Q284	8-729-422-27	TRANSISTOR 2SD601A-Q
Q285	8-729-422-27	TRANSISTOR 2SD601A-Q
Q390	8-729-422-27	TRANSISTOR 2SD601A-Q
Q391	8-729-422-27	TRANSISTOR 2SD601A-Q

RESISTOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
R080	1-247-863-91	CARBON	22K	5%	1/4W
R082	1-216-073-00	RES,CHIP	10K	5%	1/10W
R083	1-216-041-00	RES,CHIP	470	5%	1/10W
R084	1-249-429-11	CARBON	10K	5%	1/4W
R255	1-216-022-00	RES,CHIP	75	5%	1/10W
R278	1-216-295-91	SHORT			
R280	1-247-807-31	CARBON	100	5%	1/4W
R281	1-247-807-31	CARBON	100	5%	1/4W
R282	1-247-807-31	CARBON	100	5%	1/4W
R283	1-216-295-91	SHORT			
R284	1-260-091-11	CARBON	220	5%	1/2W
R285	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R286	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R287	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R288	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R289	1-216-021-00	RES,CHIP	68	5%	1/10W
R290	1-216-113-00	RES,CHIP	470K	5%	1/10W
R291	1-216-113-00	RES,CHIP	470K	5%	1/10W
R292	1-216-113-00	RES,CHIP	470K	5%	1/10W
R293	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R294	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R295	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R390	1-249-417-11	CARBON	1K	5%	1/4W
R391⚠	1-216-073-00	RES,CHIP	10K	5%	1/10W
R392	1-216-049-91	RES,CHIP	1K	5%	1/10W
R394	1-216-033-00	RES,CHIP	220	5%	1/10W
R395	1-216-049-91	RES,CHIP	1K	5%	1/10W
R450	1-216-295-91	SHORT			
R451	1-216-295-91	SHORT			
R633	1-215-479-00	METAL	270K	1%	1/4W
R637	1-215-929-11	METAL	100K	5%	3W
R638	1-215-479-00	METAL	270K	1%	1/4W
R656	1-249-402-11	CARBON	56	5%	1/4W

TRANSFORMER

T603⚠	1-433-807-11	TRANSFORMER, REGULATOR

THERMISTOR

THP601⚠	1-803-540-11	THERMISTOR

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C CV

REF.NO.	PART NO.	DESCRIPTION			REMARK

C

* **A-1331-920-A C BOARD, COMPLETE**
(KV-27S42/27S46/27S66/29SL42/29SL42C/29SL46/29XL42M only)

4-382-854-11 SCREW (M3X10), P, SW (+)

CAPACITOR

C1751	1-107-652-11	ELECT	10µF	20%	250V
C1752	1-162-114-00	CERAMIC	0.0047µF		2KV
C1755	1-107-667-11	ELECT	2.2µF	20%	160V

CONNECTOR

CN1751*	1-564-509-11	PLUG, CONNECTOR 6P
CN1752*	1-564-508-11	PLUG, CONNECTOR 5P
CN1754	1-695-915-11	TAB (CONTACT)

DIODE

D1754	8-719-901-83	DIODE 1SS83
D1755	8-719-901-83	DIODE 1SS83
D1756	8-719-901-83	DIODE 1SS83
D1758	8-719-302-43	DIODE EL1Z

IC

IC1751	8-759-562-43	IC TDA6108JF/N1B

JACK

J1751 ⚠	1-251-688-11	SOCKET, CRT

COIL

L1751	1-408-613-31	INDUCTOR	68µH		

RESISTOR

R1756	1-260-099-11	CARBON	1K	5%	1/2W
R1757	1-260-099-11	CARBON	1K	5%	1/2W
R1758	1-260-099-11	CARBON	1K	5%	1/2W
R1759	1-260-087-11	CARBON	100	5%	1/2W
R1760	1-260-123-11	CARBON	100K	5%	1/2W
R1761	1-216-373-11	METAL OXIDE	2.2	5%	2W F
R1762	1-216-375-00	METAL OXIDE	3.3	5%	2W F
R1763	1-247-807-31	CARBON	100	5%	1/4W
R1764	1-247-807-31	CARBON	100	5%	1/4W
R1765	1-247-807-31	CARBON	100	5%	1/4W
R1770	1-260-132-11	CARBON	560K	5%	1/2W

REF.NO.	PART NO.	DESCRIPTION			REMARK

CV

* **A-1331-921-A CV BOARD, COMPLETE**
(KV-29AL42/29AL42C/29AL66/29AL66C only)

4-382-854-11 SCREW (M3X10), P, SW (+)

CAPACITOR

C944	1-102-129-00	CERAMIC	0.01µF	10%	50V
C945	1-102-110-00	CERAMIC	220pF	10%	50V
C946	1-104-665-11	ELECT	100µF	20%	25V
C949	1-161-830-00	CERAMIC	0.0047µF		500V
C950	1-126-941-11	ELECT	470µF	20%	25V
C951	1-107-645-11	ELECT	22µF	20%	160V
C952	1-104-999-11	MYLAR	0.1µF	10%	200V
C953	1-106-383-00	MYLAR	0.047µF	10%	200V
C954	1-130-471-00	FILM	0.001µF	5%	50V
C955	1-107-667-11	ELECT	2.2µF	20%	160V
C956	1-130-471-00	FILM	0.001µF	5%	50V
C957	1-106-383-00	MYLAR	0.047µF	10%	200V
C958	1-126-941-11	ELECT	470µF	20%	25V
C1701	1-107-652-11	ELECT	10µF	20%	250V
C1702	1-162-114-00	CERAMIC	0.0047µF		2KV
C1705	1-107-667-11	ELECT	2.2µF	20%	160V
C1941	1-126-941-11	ELECT	470µF	20%	25V
C1948	1-102-121-00	CERAMIC	0.0022µF	10%	50V

CONNECTOR

CN942 *	1-564-507-11	PLUG, CONNECTOR 4P
CN1701*	1-564-509-11	PLUG, CONNECTOR 6P
CN1702*	1-564-511-11	PLUG, CONNECTOR 8P
CN1704	1-695-915-11	TAB (CONTACT)

DIODE

D941	8-719-991-33	DIODE 1SS133T-77
D946	8-719-110-88	DIODE RD39ESB2
D947	8-719-110-88	DIODE RD39ESB2
D1704	8-719-901-83	DIODE 1SS83
D1705	8-719-901-83	DIODE 1SS83
D1706	8-719-901-83	DIODE 1SS83
D1708	8-719-302-43	DIODE EL1Z

IC

IC1701	8-759-562-43	IC TDA6108JF/N1B

CV E

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION			REMARK
		JACK			
J1701⚠	1-251-688-11	SOCKET, CRT			
		COIL			
L1701	1-408-613-31	INDUCTOR 68µH			
		TRANSISTOR			
Q943	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q944	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q945	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q946	8-729-017-05	TRANSISTOR 2SA1837			
Q947	8-729-017-06	TRANSISTOR 2SC4793			
Q965	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q966	8-729-119-76	TRANSISTOR 2SA1175-HFE			
		RESISTOR			
R943	1-247-807-31	CARBON	100	5%	1/4W
R948	1-249-417-11	CARBON	1K	5%	1/4W
R949	1-249-421-11	CARBON	2.2K	5%	1/4W
R950	1-249-417-11	CARBON	1K	5%	1/4W
R951	1-249-417-11	CARBON	1K	5%	1/4W
R952	1-249-413-11	CARBON	470	5%	1/4W
R953	1-249-403-11	CARBON	68	5%	1/4W
R954	1-247-815-91	CARBON	220	5%	1/4W
R955	1-249-416-11	CARBON	820	5%	1/4W
R956	1-247-807-31	CARBON	100	5%	1/4W
R957	1-249-429-11	CARBON	10K	5%	1/4W
R958	1-247-807-31	CARBON	100	5%	1/4W
R959	1-249-403-11	CARBON	68	5%	1/4W
R977	1-249-397-11	CARBON	22	5%	1/4W F
R979	1-249-401-11	CARBON	47	5%	1/4W
R1706	1-260-099-11	CARBON	1K	5%	1/2W
R1707	1-260-099-11	CARBON	1K	5%	1/2W
R1708	1-260-099-11	CARBON	1K	5%	1/2W
R1709	1-260-087-11	CARBON	100	5%	1/2W
R1710	1-260-123-11	CARBON	100K	5%	1/2W
R1711	1-216-373-11	METAL OXIDE	2.2	5%	2W F
R1712	1-216-375-00	METAL OXIDE	3.3	5%	2W F
R1713	1-247-807-31	CARBON	100	5%	1/4W
R1714	1-247-807-31	CARBON	100	5%	1/4W
R1715	1-247-807-31	CARBON	100	5%	1/4W
R1720	1-260-132-11	CARBON	560K	5%	1/2W
R1941	1-260-312-11	CARBON	47	5%	1/2W
R1942	1-249-387-11	CARBON	3.3	5%	1/4W F
R1943	1-249-414-11	CARBON	560	5%	1/4W F
R1944	1-249-432-11	CARBON	18K	5%	1/4W
R1945	1-215-912-11	METAL OXIDE	150	5%	3W F
R1946	1-249-417-11	CARBON	1K	5%	1/4W F
R1947	1-249-432-11	CARBON	18K	5%	1/4W
R1948	1-249-414-11	CARBON	560	5%	1/4W
R1949	1-249-387-11	CARBON	3.3	5%	1/4W F
R1950	1-249-401-11	CARBON	47	5%	1/4W F

E

***A-1343-654-A E BOARD, COMPLETE**
(KV-27S42, 27S46, 27S66 only)

***A-1343-656-A E BOARD, COMPLETE**
(KV-29AL42, 29AL42C, 29AL66, 29AL66C, 29SL42, 29SL42C, 29SL46, 29XL42M, only)

	1-533-223-11	HOLDER, FUSE			
*	4-374-846-01	COVER, CAPACITOR, CAP TYPE			
		CAPACITOR			
C5002	1-107-679-91	ELECT	10µF	20%	450V
C5003	1-136-601-11	FILM	0.01µF	10%	630V
C5004	1-130-471-00	MYLAR	0.001µF	5%	50V
C5006	1-130-471-00	MYLAR	0.001µF	5%	50V
C5007	1-130-467-00	MYLAR	470pF	5%	50V
C5008	1-130-471-00	MYLAR	0.001µF	5%	50V
C5009	1-126-965-11	ELECT	22µF	20%	50V
C5010	1-115-804-91	ELECT	120µF	20%	35V
C5020⚠	1-113-920-11	CERAMIC	0.0022µF	20%	125V
(KV-27S42/27S46/27S66 only)					
C5020⚠	1-113-924-11	CERAMIC	0.0047µF	20%	250V
(KV-29AL66/29AL66C/29AL42/29AL42C/29SL42/29SL42C/29XL42M/29SL46 only)					
C5021⚠	1-113-924-11	CERAMIC	0.0047µF	20%	250V
(KV-29AL66/29AL66C/29AL42/29AL42C/29SL42/29SL42C/29XL42M/29SL46 only)					
C5050⚠	1-136-311-11	FILM	0.47µF	20%	125V
C5150⚠	1-136-311-11	FILM	0.47µF	20%	125V
(KV-27S42/27S46/27S66 only)					
C5643	1-113-924-11	CERAMIC	0.0047µF	20%	250V
C5644	1-113-924-11	CERAMIC	0.0047µF	20%	250V
		CONNECTOR			
CN5000*	1-580-843-11	PIN, CONNECTOR (POWER)	2P		
CN5001*	1-564-506-11	PLUG, CONNECTOR	3P		
CN5002*	1-580-843-11	PIN, CONNECTOR (POWER)	2P		
CN5003*	1-508-786-00	PIN, CONNECTOR (5MM PITCH)	2P		
		DIODE			
D5003	8-719-948-45	DIODE ERA22-08			
D5004	8-719-991-33	DIODE 1SS133T-77			
D5005	8-719-991-33	DIODE 1SS133T-77			
D5006	8-719-109-93	DIODE RD6.2ESB2			
D5007	8-719-510-48	DIODE D1N20R			
D5008	8-719-063-70	DIODE D1NL20U			
D5631	8-719-911-55	DIODE U05G			
D5632	8-719-911-55	DIODE U05G			

E HT

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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REF.NO.	PART NO.	DESCRIPTION	REMARK

FUSE

F5050⚠	1-576-193-11	FUSE 6.3A/125V (KV-27S42/27S46/27S66 only)	
F5050⚠	1-532-506-51	FUSE 6.3A/250V (KV-29AL66/29AL66C/29AL42/29AL42C/29SL42/29SL42C/29XL42M/29SL46 only)	

TRANSISTOR

Q5001	8-729-044-30	TRANSISTOR 2SK2845-LB102	
Q5002	8-729-119-78	TRANSISTOR 2SC2785-HFE	

RESISTOR

R5001	1-249-389-11	CARBON	4.7	5%	1/4W	F
R5002	1-215-485-00	METAL	470K	1%	1/4W	
R5003	1-240-205-91	CARBON	22M	5%	1/2W	
R5007	1-249-421-11	CARBON	2.2K	5%	1/4W	
R5008	1-249-429-11	CARBON	10K	5%	1/4W	
R5009	1-249-437-11	CARBON	47K	5%	1/4W	
R5010	1-249-415-11	CARBON	680	5%	1/4W	
R5011	1-260-302-51	CARBON	6.8	5%	1/2W	
R5012	1-249-417-11	CARBON	1K	5%	1/4W	
R5013	1-249-415-11	CARBON	680	5%	1/4W	
R5050	1-219-512-11	CARBON	2.2M	5%	1/2W	
R5350⚠	1-219-513-11	CARBON	4.7M	5%	1/2W	(KV-27S42/27S46/27S66 only)
R5350⚠	1-247-289-00	CARBON	8.2M	5%	1W	(KV-29AL66/29AL66C/29AL42/29AL42C/29SL42/29SL42C/29XL42M/29SL46 only)

TRANSFORMER

T5001⚠	1-431-852-11	TRANSFORMER, CONVERTER (SRT)
T5050⚠	1-431-838-11	TRANSFORMER, LINE FILTER (KV-27S42/27S46/27S66 only)
T5050⚠	1-426-717-11	TRANSFORMER, LINE FILTER (KV-29AL66/29AL66C/29AL42/29AL42C/29SL42/29SL42C/29XL42M/29SL46 only)

THERMISTOR

TH506	1-803-586-11	THERMISTOR

VARISTOR

VDR505	1-803-585-11	VARISTOR (KV-27S42/27S46/27S66 only)
VDR505	1-803-587-11	VARISTOR (KV-29AL66/29AL66C/29AL42/29AL42C/29SL42/29SL42C/29XL42M/29SL46 only)

REF.NO.	PART NO.	DESCRIPTION	REMARK

HT

* **A-1372-616-A HT BOARD, COMPLETE**
(KV-29AL42/29AL42C/29AL66/29AL66C only)

CONNECTOR

CN2201*	1-564-518-11	PLUG, CONNECTOR 3P	

RESISTOR

R2001	1-249-415-11	CARBON	680	5%	1/4W
R2002	1-249-416-11	CARBON	820	5%	1/4W
R2003	1-249-421-11	CARBON	2.2K	5%	1/4W
R2004	1-249-427-11	CARBON	6.8K	5%	1/4W
R2005	1-249-429-11	CARBON	10K	5%	1/4W
R2006	1-247-815-91	CARBON	220	5%	1/4W

SWITCH

S2001	1-572-198-11	SWITCH, KEYBOARD
S2002	1-572-198-11	SWITCH, KEYBOARD
S2003	1-572-198-11	SWITCH, KEYBOARD
S2004	1-572-198-11	SWITCH, KEYBOARD
S2005	1-572-198-11	SWITCH, KEYBOARD
S2006	1-572-198-11	SWITCH, KEYBOARD
S2007	1-572-198-11	SWITCH, KEYBOARD

HV K

REF.NO.	PART NO.	DESCRIPTION			REMARK

HV

* **A-1372-617-A HV BOARD, COMPLETE**
(KV-29AL42/29AL42C/29AL66/29AL66C only)

CAPACITOR

C1407	1-137-194-91	FILM	0.47µF	5%	50V
C1408	1-136-287-11	FILM	0.0047µF	5%	50V
C1409	1-137-194-81	FILM	0.47µF	5%	50V
C1410	1-126-964-11	ELECT	10µF	20%	50V
C1411	1-126-964-11	ELECT	10µF	20%	50V
C1412	1-126-964-11	ELECT	10µF	20%	50V
C1413	1-126-964-11	ELECT	10µF	20%	50V
C1415	1-126-968-11	ELECT	100µF	20%	50V
C1416	1-106-375-12	MYLAR	0.022µF	20%	200V
C1417	1-137-414-11	FILM	0.0047µF	10%	100V
C1418	1-102-114-00	CERAMIC	470pF	10%	50V
C1419	1-130-495-00	FILM	0.1µF	5%	50V
C1420	1-137-371-11	FILM	0.015µF	5%	50V
C1421	1-102-121-00	CERAMIC	0.0022µF	10%	50V
C1422	1-137-414-11	FILM	0.0047µF	10%	100V
C1423	1-137-194-91	FILM	0.47µF	5%	50V
C1424	1-130-495-00	FILM	0.1µF	5%	50V
C1425	1-137-370-11	FILM	0.01µF	5%	50V
C1426	1-130-495-00	FILM	0.1µF	5%	50V
C1427	1-137-370-11	FILM	0.01µF	5%	50V
C1428	1-130-495-00	FILM	0.1µF	5%	50V
C1429	1-137-370-11	FILM	0.01µF	5%	50V
C1430	1-126-964-11	ELECT	10µF	20%	50V
C1431	1-136-287-11	FILM	0.0047µF	5%	50V
C1432	1-126-964-11	ELECT	10µF	20%	50V
C1437	1-126-964-11	ELECT	10µF	20%	50V
C2068	1-104-665-11	ELECT	100µF	20%	25V
C2234	1-126-960-11	ELECT	1µF	20%	50V
C2235	1-126-960-11	ELECT	1µF	20%	50V
C2236	1-106-343-00	MYLAR	0.001µF	10%	200V

CONNECTOR

CN1405*	1-564-510-11	PLUG, CONNECTOR	7P
CN1406*	1-564-506-11	PLUG, CONNECTOR	3P
CN2001*	1-564-506-11	PLUG, CONNECTOR	3P
CN2201*	1-564-508-11	PLUG, CONNECTOR	5P
CN2202*	1-564-510-11	PLUG, CONNECTOR	7P

DIODE

D2001	8-719-110-17	DIODE RD10ESB2
D2006	1-810-039-21	LED UNIT
D2235	8-719-110-17	DIODE RD10ESB2
D2236	8-719-110-17	DIODE RD10ESB2

REF.NO.	PART NO.	DESCRIPTION			REMARK

IC

IC1403	8-759-496-03	IC NJM2178L
IC2003	8-742-014-11	HYB IC SBX1981-51

JACK

J2231	1-691-110-11	JACK, PIN 3P

RESISTOR

R1403	1-215-437-00	METAL	4.7K	1%	1/4W
R1404	1-249-419-11	CARBON	1.5K	5%	1/4W
R1405	1-249-424-11	CARBON	3.9K	5%	1/4W
R1406	1-249-437-11	CARBON	47K	5%	1/4W
R1407	1-249-435-11	CARBON	33K	5%	1/4W
R1408	1-215-469-00	METAL	100K	1%	1/4W
R1409	1-249-417-11	CARBON	1K	5%	1/4W
R1410	1-215-461-00	METAL	47K	1%	1/4W
R1411	1-249-429-11	CARBON	10K	5%	1/4W
R1412	1-247-807-31	CARBON	100	5%	1/4W
R1413	1-247-807-31	CARBON	100	5%	1/4W
R1414	1-249-429-11	CARBON	10K	5%	1/4W
R1415	1-249-429-11	CARBON	10K	5%	1/4W
R1416	1-249-429-11	CARBON	10K	5%	1/4W
R1417	1-249-429-11	CARBON	10K	5%	1/4W
R1419	1-249-441-11	CARBON	100K	5%	1/4W
R1420	1-249-429-11	CARBON	10K	5%	1/4W
R1421	1-249-441-11	CARBON	100K	5%	1/4W
R1422	1-249-429-11	CARBON	10K	5%	1/4W
R1423	1-249-441-11	CARBON	100K	5%	1/4W
R1430	1-215-461-00	METAL	47K	1%	1/4W
R1431	1-249-429-11	CARBON	10K	5%	1/4W
R1433	1-249-429-11	CARBON	10K	5%	1/4W
R1434	1-215-445-00	METAL	10K	1%	1/4W
R1435	1-249-431-11	CARBON	15K	5%	1/4W
R2236	1-247-895-91	CARBON	470K	5%	1/4W
R2238	1-247-895-91	CARBON	470K	5%	1/4W

K

* **A-1380-608-A K BOARD, COMPLETE**
(KV-27S66/29AL42/29AL42C/29AL66/29AL66C only)
* **A-1380-611-A K BOARD, COMPLETE**
(KV-27S66 only)
* **A-1380-612-A K BOARD, COMPLETE**
(KV-29AL42/29AL42C only)

4-382-854-11 SCREW (M3X10), P, SW (+)

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

K

REF.NO.	PART NO.	DESCRIPTION			REMARK

CAPACITOR

C1001	1-126-968-11	ELECT	100µF	20%	50V
C1002	1-104-664-11	ELECT	47µF	20%	25V
C1003	1-126-964-11	ELECT	10µF	20%	50V
C1004	1-126-934-11	ELECT	220µF	20%	16V
C1006	1-137-368-11	FILM	0.0047µF	5%	50V
C1007	1-126-960-11	ELECT	1µF	20%	50V
C1401	1-126-957-11	ELECT (KV-29AL66/29AL66C only)	0.22µF	20%	50V
C1401	1-126-959-11	ELECT (KV-29AL42/29AL42C only)	0.47µF	20%	50V
C1402	1-126-957-11	ELECT (KV-29AL66/29AL66C only)	0.22µF	20%	50V
C1402	1-126-959-11	ELECT (KV-29AL42/29AL42C only)	0.47µF	20%	50V
C1403	1-126-943-11	ELECT (KV-29AL42/29AL42C/29AL66/29AL66C only)	2200µF	20%	25V
C1404	1-126-943-11	ELECT (KV-29AL42/29AL42C/29AL66/29AL66C only)	2200µF	20%	25V
C1405	1-126-382-11	ELECT	100µF	20%	16V
C1406	1-126-382-11	ELECT	100µF	20%	16V
C1450	1-136-171-00	FILM	0.33µF	5%	50V
C1451	1-136-171-00	FILM	0.33µF	5%	50V
C1452	1-137-367-11	FILM (KV-29AL42/29AL42C/29AL66/29AL66C only)	0.0033µF	5%	50V
C1453	1-137-367-11	FILM (KV-29AL42/29AL42C/29AL66/29AL66C only)	0.0033µF	5%	50V

CONNECTOR

CN1001*1-691-632-21 CONNECTOR, BOARD TO BOARD 15P
(KV-27S66 only)
CN1002*1-564-507-11 PLUG, CONNECTOR 4P
CN1003*1-564-511-11 PLUG, CONNECTOR 8P
(KV-29AL42/29AL42C/29AL66/29AL66C only)

CN1004*1-564-509-11 PLUG, CONNECTOR 6P
(KV-29AL66/29AL66C only)
CN1400*1-564-507-11 PLUG, CONNECTOR 4P
CN1401*1-564-506-11 PLUG, CONNECTOR 3P
CN1402*1-564-510-11 PLUG, CONNECTOR 7P
(KV-29AL42/29AL42C/29AL66/29AL66C only)

IC

IC1400 8-759-498-09 IC TDA1519AQU
(KV-29AL42/29AL42C/29AL66/29AL66C only)
IC1401 8-759-498-09 IC TDA1519AQU
(KV-29AL42/29AL42C/29AL66/29AL66C only)

COIL

L1001	1-408-421-00	INDUCTOR	100µH
L1002	1-410-470-11	INDUCTOR	10µH

REF.NO.	PART NO.	DESCRIPTION			REMARK

IC LINK

PS1400	1-532-984-11	LINK, IC	2A/90V
PS1401	1-532-984-11	LINK, IC	2A/90V

TRANSISTOR

Q1001	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1002	8-729-119-76	TRANSISTOR	2SA1175-HFE
Q1003	8-729-119-76	TRANSISTOR	2SA1175-HFE
Q1004	8-729-119-76	TRANSISTOR	2SA1175-HFE
Q1006	8-729-119-76	TRANSISTOR	2SA1175-HFE
Q1400	8-729-119-78	TRANSISTOR	2SC2785-HFE

RESISTOR

R1001	1-247-807-31	CARBON	100	5%	1/4W
R1002	1-247-807-31	CARBON	100	5%	1/4W
R1003	1-249-434-11	CARBON	27K	5%	1/4W
R1004	1-249-436-11	CARBON	39K	5%	1/4W
R1006	1-249-419-11	CARBON	1.5K	5%	1/4W
R1007	1-247-863-91	CARBON	22K	5%	1/4W
R1008	1-247-863-91	CARBON	22K	5%	1/4W
R1009	1-247-863-91	CARBON	22K	5%	1/4W
R1010	1-247-863-91	CARBON	22K	5%	1/4W
R1011	1-249-414-11	CARBON	560	5%	1/4W
R1012	1-249-414-11	CARBON	560	5%	1/4W
R1013	1-247-807-31	CARBON	100	5%	1/4W
R1016	1-247-863-91	CARBON	22K	5%	1/4W
R1017	1-247-863-91	CARBON	22K	5%	1/4W
R1401	1-249-429-11	CARBON	10K	5%	1/4W
R1402	1-249-437-11	CARBON	47K	5%	1/4W
R1433	1-249-421-11	CARBON	2.2K	5%	1/4W
R1434	1-249-429-11	CARBON	10K	5%	1/4W
R1435	1-249-429-11	CARBON	10K	5%	1/4W
R1436	1-249-421-11	CARBON	2.2K	5%	1/4W
R1437	1-247-863-91	CARBON	22K	5%	1/4W
R1450	1-249-422-11	CARBON	2.7K	5%	1/4W
R1451	1-249-422-11	CARBON	2.7K	5%	1/4W
R1452	1-249-428-11	CARBON (KV-29AL66/29AL66C only)	8.2K	5%	1/4W
R1452	1-249-429-11	CARBON (KV-29AL42/29AL42C only)	10K	5%	1/4W
R1453	1-249-428-11	CARBON (KV-29AL66/29AL66C only)	8.2K	5%	1/4W
R1453	1-249-429-11	CARBON (KV-29AL42/29AL42C only)	10K	5%	1/4W

TUNER

TU1002⚠8-598-430-00 TUNER, FSS BTF-FA401
(KV-27S66/29AL66/29AL66C only)

P

P

*** A-1195-154-A P BOARD, COMPLETE**
(KV-29AL66/29AL66C/27S46/27S66/29SL46 only)

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3301	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C3302	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C3303	1-104-664-11	ELECT	47µF	20%	16V
C3304	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C3305	1-163-135-00	CERAMIC CHIP	560pF	5%	50V
C3306	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C3307	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C3308	1-164-222-11	CERAMIC CHIP	0.22µF		25V
C3309	1-163-034-00	CERAMIC CHIP	0.033µF		50V
C3310	1-164-222-11	CERAMIC CHIP	0.22µF		25V
C3311	1-163-233-11	CERAMIC CHIP	18pF	5%	50V
C3314	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C3315	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C3316	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C3317	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C3323	1-104-664-11	ELECT	47µF	20%	16V
C3324	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C3325	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C3326	1-104-664-11	ELECT	47µF	20%	16V
C3327	1-104-664-11	ELECT	47µF	20%	16V
C3328	1-104-664-11	ELECT	47µF	20%	16V
C3330	1-126-964-11	ELECT	10µF	20%	50V
C3334	1-164-005-11	CERAMIC CHIP	0.47µF		25V
C3335	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C3336	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C3339	1-163-005-11	CERAMIC CHIP	470pF	10%	50V

CONNECTOR

CN3301*	1-691-632-21	CONNECTOR, BOARD TO BOARD 15P	

DIODE

D3301	8-719-404-50	DIODE MA111-TX
D3304	8-719-422-12	DIODE MA8039

IC

IC3301	8-759-575-99	IC M65669FP

COIL

L3301	1-410-682-31	INDUCTOR	470µH
L3302	1-414-267-11	INDUCTOR	10µH
L3303	1-414-267-11	INDUCTOR	10µH

TRANSISTOR

Q3304	8-729-216-22	TRANSISTOR 2SA1162-G
Q3305	8-729-216-22	TRANSISTOR 2SA1162-G
Q3306	8-729-216-22	TRANSISTOR 2SA1162-G
Q3309	8-729-422-27	TRANSISTOR 2SD601A-Q
Q3310	8-729-422-27	TRANSISTOR 2SD601A-Q
Q3311	8-729-111-55	TRANSISTOR 2SD1312-K
Q3312	8-729-216-22	TRANSISTOR 2SA1162-G
Q3313	8-729-422-27	TRANSISTOR 2SD601A-Q
Q3314	8-729-422-27	TRANSISTOR 2SD601A-Q

RESISTOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3301	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3302	1-216-121-91	RES,CHIP	1M	5%	1/10W
R3303	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3304	1-216-119-00	RES,CHIP	820K	5%	1/10W
R3305	1-216-037-00	RES,CHIP	330	5%	1/10W
R3308	1-216-085-00	RES,CHIP	33K	5%	1/10W
R3309	1-216-025-91	RES,CHIP	100	5%	1/10W
R3310	1-216-025-91	RES,CHIP	100	5%	1/10W
R3311	1-216-037-00	RES,CHIP	330	5%	1/10W
R3312	1-216-045-00	RES,CHIP	680	5%	1/10W
R3313	1-216-037-00	RES,CHIP	330	5%	1/10W
R3316	1-216-295-91	SHORT			
R3317	1-216-295-91	SHORT			
R3318	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R3319	1-216-295-91	SHORT			
R3328	1-216-295-91	SHORT			
R3329	1-216-033-00	RES,CHIP	220	5%	1/10W
R3333	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3334	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3335	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3336	1-216-295-91	SHORT			
R3338	1-216-295-91	SHORT			
R3340	1-216-295-91	SHORT			
R3342	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3343	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3344	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3345	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3346	1-216-295-91	SHORT			
R3347	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3348	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3349	1-215-857-11	METAL OXIDE	10	5%	1W F
R3351	1-216-041-00	RES,CHIP	470	5%	1/10W
R3352	1-216-295-91	SHORT			
R3357	1-216-041-00	RES,CHIP	470	5%	1/10W
R3358	1-216-689-11	RES,CHIP	39K	5%	1/10W
R3359	1-216-113-00	RES,CHIP	470K	5%	1/10W
R3360	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R3361	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R3365	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3366	1-216-049-91	RES,CHIP	1K	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R3367	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3368	1-216-049-91	RES,CHIP	1K	5%	1/10W

CRYSTAL

X3301	1-781-377-11	OSCILLATOR, CRYSTAL

ACCESSORIES AND PACKING MATERIAL

3-866-074-21 MANUAL, INSTRUCTION
(KV-27S42/27S46/27S66 only)
3-866-074-31 MANUAL, INSTRUCTION
(KV-27S42 (CND)/27S66 (CND) only)
3-866-074-41 MANUAL, INSTRUCTION
(KV-29SL42/29XL42M/29SL42C/29SL46/29AL42/29AL42C/29AL66/
29AL66C only)

* 4-041-255-01 PROTECTION BAG (all models)

* 4-064-062-11 CARTON, INDIVIDUAL
(KV-29SL42/29XL42M/29SL42C/29SL46 only)
* 4-064-065-01 CARTON, INDIVIDUAL
(KV-27S42/27S46/27S66 only)
* 4-064-241-11 CARTON, INDIVIDUAL
(KV-29AL42/29AL42C/29AL66/29AL66C only)

* 4-064-029-01 CUSHION ASSY, UPPER
(KV-29AL42/29AL42C/29AL66/29AL66C only)
* 4-064-069-01 CUSHION ASSY, UPPER
(KV-27S42/29SL42/29XL42M/29SL42C/27S46/29SL46/27S66 only)

* 4-064-032-01 CUSHION ASSY, LOWER
(KV-29AL42/29AL42C/29AL66/29AL66C only)
* 4-064-071-01 CUSHION ASSY, LOWER
(KV-27S42/29SL42/29XL42M/29SL42C/27S46/29SL46/27S66 only)

REMOTE COMMANDER

1-475-801-11 REMOTE COMMANDER (RM-Y165)
(KV-29SL42/29XL42M/29SL42C/29AL42/29AL42C only)

1-475-801-21 REMOTE COMMANDER (RM-Y165)
(KV-27S42 only)

1-475-802-11 REMOTE COMMANDER (RM-Y167)
(KV-29SL46/29AL66/29AL66C only)

1-475-802-21 REMOTE COMMANDER (RM-Y167)
(KV-27S46/27S66 only)

4-978-977-01 BATTERY COVER
(for remote RM-Y165/RM-Y167)

REF.NO.	PART NO.	DESCRIPTION	REMARK

NOTES:

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Self Diagnosis Supported model

SERVICE MANUAL BA-4D CHASSIS

MODEL	COMMANDER	DEST	CHASSIS NO.
KV-27S42	RM-Y165	US	SCC-S27H-A
KV-27S42	RM-Y165	CND	SCC-S28F-A
KV-27S46	RM-Y167	US	SCC-S27K-A
KV-27S66	RM-Y167	US	SCC-S27L-A
KV-27S66	RM-Y167	CND	SCC-S28G-A
KV-29AL42	RM-Y165	E	SCC-S25U-A
KV-29AL42C	RM-Y165	E	SCC-S25Y-A
KV-29AL66	RM-Y167	E	SCC-S25T-A
KV-29AL66C	RM-Y167	E	SCC-S25V-A
KV-29SL42	RM-Y165	E	SCC-S25W-A
KV-29SL42C	RM-Y165	E	SCC-S25S-A
KV-29SL46	RM-Y167	E	SCC-S25X-A
KV-29XL42M	RM-Y165	MX	SCC-S26C-A

CORRECTION-1

SUBJECT: Incorrect Part Number for CRT (KV-2766 only)

Correct the service manual as shown.
File this correction with the service manual.

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Section 7-1: Chassis (KV-27S66) page 46

☞ : Corrected item

Incorrect

REF. NO.		PART NO.	DESCRIPTION	REMARK
7	⚠	8-733-874-05	CRT 29NX	

Correct

REF. NO.		PART NO.	DESCRIPTION	REMARK
7	⚠	8-733-873-05	CRT 29NX	

9-978-857-91

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Self Diagnosis Supported model

SERVICE MANUAL BA-4D CHASSIS

MODEL	COMMANDER	DEST	CHASSIS NO.
KV-27S42	RM-Y165	US	SCC-S27H-A
KV-27S42	RM-Y165	CND	SCC-S28F-A
KV-27S46	RM-Y167	US	SCC-S27K-A
KV-27S66	RM-Y167	US	SCC-S27L-A
KV-27S66	RM-Y167	CND	SCC-S28G-A
KV-29AL42	RM-Y165	E	SCC-S25U-A
KV-29AL42C	RM-Y165	E	SCC-S25Y-A
KV-29AL66	RM-Y167	E	SCC-S25T-A
KV-29AL66C	RM-Y167	E	SCC-S25V-A
KV-29SL42	RM-Y165	E	SCC-S25W-A
KV-29SL42C	RM-Y165	E	SCC-S25S-A
KV-29SL46	RM-Y167	E	SCC-S25X-A
KV-29XL42M	RM-Y165	MX	SCC-S26C-A

CORRECTION-2

SUBJECT: DY P/N Correction

Correct the service manual as shown.
File this Correction with the service manual.

☛ **: Corrected Items**

Section 7: Exploded Views(Page 46 and 47)

INCORRECT			CORRECT		
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
10 ⚠	8-451-846-21	DYY29VXA-V2	☛ 10 ⚠	8-451-486-21	DYY29NXA-V2
15 ⚠	8-451-846-21	DYY29VXA-V2	☛ 15 ⚠	8-451-486-21	DYY29NXA-V2

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English
99IJ74340-01
Printed in USA
1999.9

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Self Diagnosis Supported model

SERVICE MANUAL BA-4D CHASSIS

MODEL	COMMANDER	DEST	CHASSIS NO.
KV-27S42	RM-Y165	US	SCC-S27H-A
KV-27S42	RM-Y165	CND	SCC-S28F-A
KV-27S46	RM-Y167	US	SCC-S27K-A
KV-27S66	RM-Y167	US	SCC-S27L-A
KV-27S66	RM-Y167	CND	SCC-S28G-A
KV-29AL42	RM-Y165	E	SCC-S25U-A
KV-29AL42C	RM-Y165	E	SCC-S25Y-A
KV-29AL66	RM-Y167	E	SCC-S25T-A
KV-29AL66C	RM-Y167	E	SCC-S25V-A
KV-29SL42	RM-Y165	E	SCC-S25W-A
KV-29SL42C	RM-Y165	E	SCC-S25S-A
KV-29SL46	RM-Y167	E	SCC-S25X-A
KV-29XL42M	RM-Y165	MX	SCC-S26C-A
☛ **KV-29SL43**	RM-Y165	E	SCC-S55C-A

SUPPLEMENT-1

Subject: New model added. New parts added to Exploded View.

Correct the service manual as shown below.
File this correction with the service manual.

☛ **: Modified Item**

Section 7: Exploded View (Page 47)

7-2. Chassis (KV-27S46/27S42/29SL42/29SL42C/29SL46/29XL42M)

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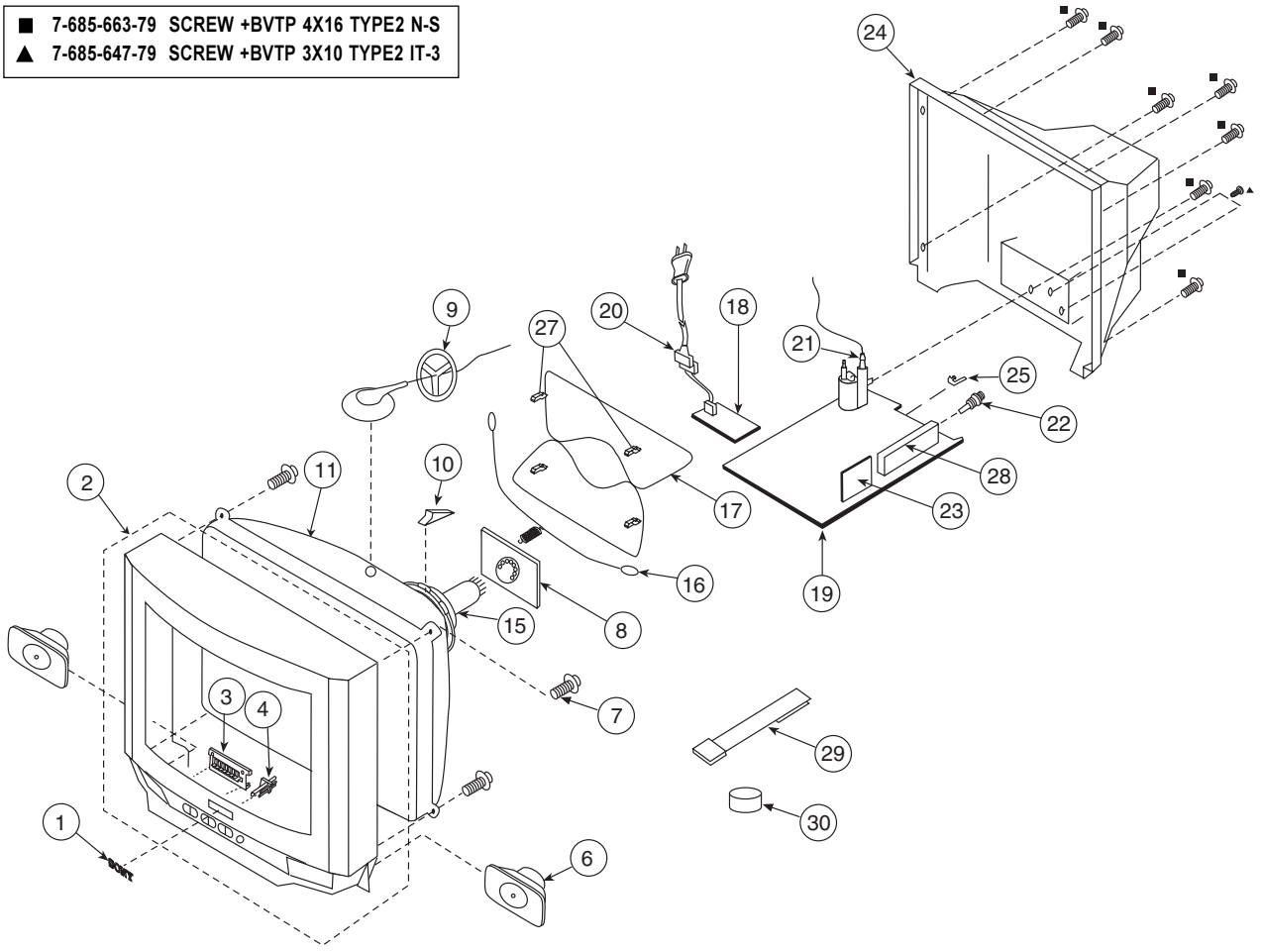
9-965-857-81

☛7-2. CHASSIS (KV-27S46/27S42/29SL42/29SL42C/29SL46/29XL42M/29SL43)

■ 7-685-663-79 SCREW +BVTP 4X16 TYPE2 N-S
▲ 7-685-647-79 SCREW +BVTP 3X10 TYPE2 IT-3



REF NO.		PART NO.	DESCRIPTION	REMARK
1		4-046-160-11	EMBLEM (NO.9), SONY	
2		X-4035-816-1	BEZNET ASSY (KV-27S46/29SL46)	3-4
2		X-4035-818-1	BEZNET ASSY (KV-29XL42M)	3-4
2		X-4035-815-1	BEZNET ASSY (KV-27S42/29SL42/42C)	3-4
☛2		X-4039-334-1	BEZNET ASSY (KV-29SL43)	3-4
3		4-063-573-01	MULTI BUTTON(KV-27S42/27S46/29SL42/ 29SL42C/29SL46/29XL42M)	
☛3		4-063-573-11	MULTI BUTTON (KV-29SL43)	
4		4-063-570-01	GUIDE, LED	
6		1-504-531011	SPEAKER (13.1 x 6.2CM)	
7		4-041-268-01	SCREW (7), TAPPING	
8	*	A-1331-920-A	C MOUNTED PC BOARD	
9		3-704-372-31	HOLDER, HV CABLE	
10		4-053-005-01	SPACER, DY	
11		8-733-873-05	CRT 29NX (EXCEPT KV-29SL42C)	
11		8-733-874-05	CRT 29NX (KV-29SL42C only)	
15		8-451-846-21	DYY29NXA-V2	
16		4-036-329-01	SPRING (B), TENSION	
17		1-416-952-11	COIL, DEGAUSSING (KV-29SL42/29XL42M/29SL42C/29SL46)	
17		1-416-588-11	COIL, DEMAGNETIC (KV-27S42/27S46)	
18	*	A-1343-656-A	E (VAR) MOUNTED PC BOARD (KV-29SL42/29XL42M/29SL46)	
18	*	A-1343-654-A	E (VAR) MOUNTED PC BOARD (KV-27S42/27S46)	
19	*	A-1298-900-A	A COMPLETE PC BOARD (KV-27S46)	
19	*	A-1298-904-A	A COMPLETE PC BOARD (KV-29XL42M/29SL42/29SL42C)	
19	*	A-1298-911-A	A COMPLETE PC BOARD (KV-29SL46)	
19	*	A-1298-840-A	A COMPLETE PC BOARD (KV-27S42)	
20		1-790-130-21	CORD, AC (KV-27S42/27S46)	
20		1-751-057-11	CORD, POWER (WITH CONNECTOR) 10A/125V (KV-29SL42/29XL42M/29SL46)	
20		1-769-796-31	CORD, POWER (WITH CONNECTOR) 10A/125V (KV-29SL42C)	
21		1-453-268-21	FBT ASSY NX-4005//X4J4	
22		1-766-374-11	PLUG, F-PIN	
23	*	A-1195-154-A	P COMPLETE PC BOARD (KV-27S46/29SL46)	
24		4-063-572-02	COVER, REAR	
25		4-064-646-01	CHASSIS, CLIP	
27		4-040-388-01	HOLDER (S), DGC (EXCEPT KV-29SL46)	
28		8-598-431-00	TUNER, FSS BTF-WA411	
29		4-062-047-01	PIECE A(110), CONV CORRECT	
30		1-452-032-00	MAGNET,DISC	

SERVICE MANUAL BA-4D CHASSIS

Self Diagnosis Supported model

	KV-27S42	*RM-Y165*	*US*	*SCC-S27H-A*
	KV-27S42	*RM-Y165*	*CND*	*SCC-S28F-A*
	KV-27S46	*RM-Y167*	*US*	*SCC-S27K-A*
	KV-27S66	*RM-Y167*	*US*	*SCC-S27L-A*
	KV-27S66	*RM-Y167*	*CND*	*SCC-S28G-A*
	KV-29AL42	*RM-Y165*	*E*	*SCC-S25U-A*
	KV-29AL42C	*RM-Y165*	*E*	*SCC-S25Y-A*
	KV-29AL66	*RM-Y167*	*E*	*SCC-S25T-A*
	KV-29AL66C	*RM-Y167*	*E*	*SCC-S25V-A*
	KV-29SL42	*RM-Y165*	*E*	*SCC-S25W-A*
	KV-29SL42C	*RM-Y165*	*E*	*SCC-S25S-A*
	KV-29SL46	*RM-Y167*	*E*	*SCC-S25X-A*
	KV-29XL42M	*RM-Y165*	*MX*	*SCC-S26C-A*
	KV-29SL43	*RM-Y165*	*E*	*SCC-S55C-A*
☛	***KV-29SL43C***	*RM-Y165*	*E*	*SCC-S55D-A*

SUPPLEMENT-2

Subject: New model added. New parts added to Exploded View.

Correct the service manual as shown below.
File this correction with the service manual.

☛ : **Modified Item**

Section 7: Exploded View (Page 47)

7-2. Chassis (KV-27S46/27S42/29SL42/29SL42C/29SL46/29XL42M/29SL43/29SL43C)

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2001HJ74405-1
Printed in U.S.A.
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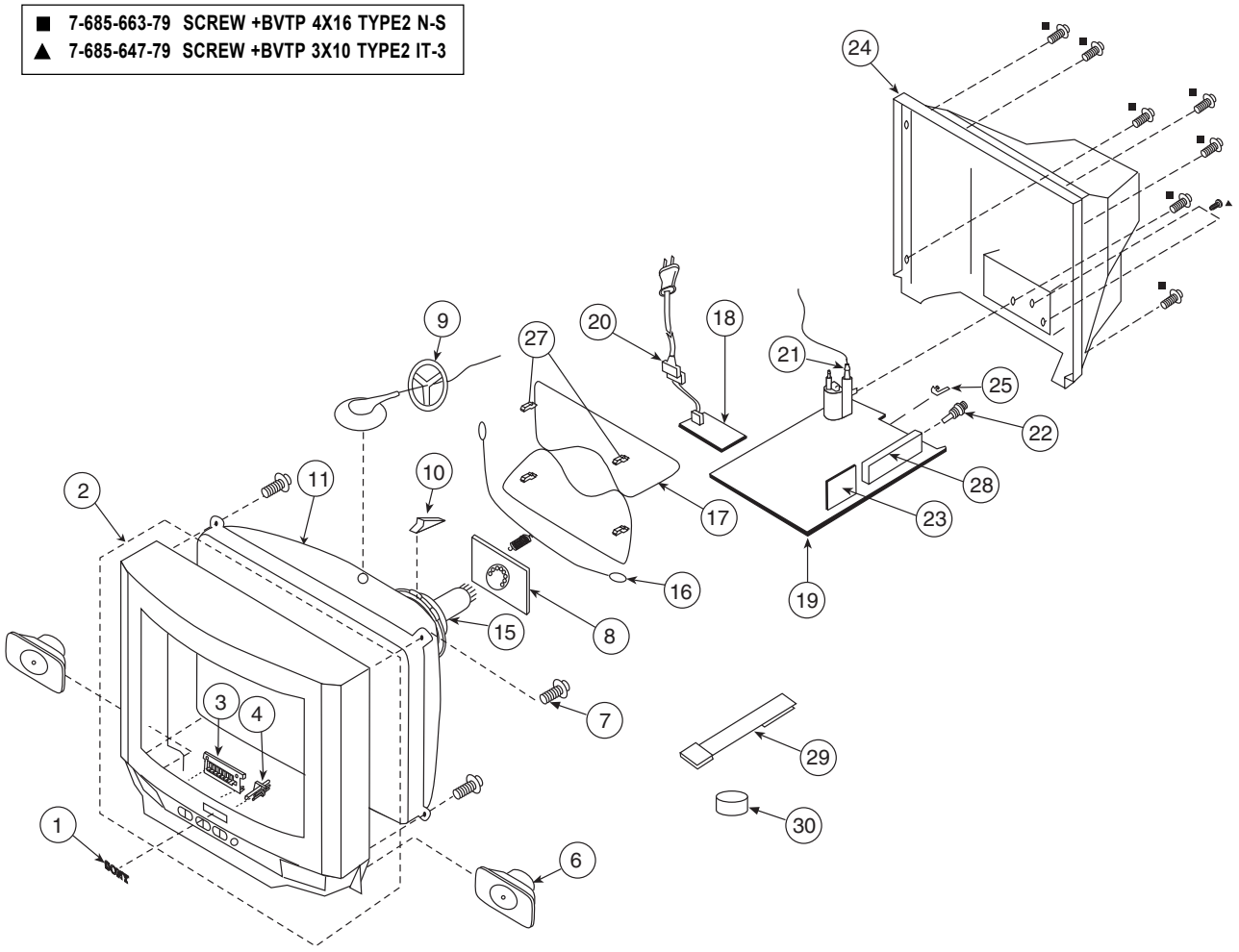
9-965-857-82

☛7-2. CHASSIS (KV-27S46/27S42/29SL42/29SL42C/29SL46/29XL42M/29SL43/29SL43C)

■ 7-685-663-79 SCREW +BVTP 4X16 TYPE2 N-S
▲ 7-685-647-79 SCREW +BVTP 3X10 TYPE2 IT-3



REF NO.		PART NO.	DESCRIPTION	REMARK
1		4-046-160-11	EMBLEM (NO.9), SONY	
2		X-4035-816-1	BEZNET ASSY (KV-27S46/29SL46)	3-4
2		X-4035-818-1	BEZNET ASSY (KV-29XL42M)	3-4
2		X-4035-815-1	BEZNET ASSY (KV-27S42/29SL42/42C)	3-4
☛2		X-4039-334-1	BEZNET ASSY (KV-29SL43/29SL43C)	3-4
3		4-063-573-01	MULTI BUTTON(KV-27S42/27S46/29SL42/ 29SL42C/29SL46/29XL42M)	
☛3		4-063-573-11	MULTI BUTTON (KV-29SL43/29SL43C)	
4		4-063-570-01	GUIDE, LED	
6		1-504-531011	SPEAKER (13.1 x 6.2CM)	
7		4-041-268-01	SCREW (7), TAPPING	
8	*	A-1331-920-A	C MOUNTED PC BOARD	
9		3-704-372-31	HOLDER, HV CABLE	
10		4-053-005-01	SPACER, DY	
11		8-733-873-05	CRT 29NX (EXCEPT KV-29SL42C)	
11		8-733-874-05	CRT 29NX (KV-29SL42C only)	
15		8-451-846-21	DYY29NXA-V2	
16		4-036-329-01	SPRING (B), TENSION	
17		1-416-952-11	COIL, DEGAUSSING (KV-29SL42/29XL42M/29SL42C/29SL46)	
17		1-416-588-11	COIL, DEMAGNETIC (KV-27S42/27S46)	
18	*	A-1343-656-A	E (VAR) MOUNTED PC BOARD (KV-29SL42/29XL42M/29SL46)	
18	*	A-1343-654-A	E (VAR) MOUNTED PC BOARD (KV-27S42/27S46)	
19	*	A-1298-900-A	A COMPLETE PC BOARD (KV-27S46)	
19	*	A-1298-904-A	A COMPLETE PC BOARD (KV-29XL42M/29SL42/29SL42C)	
19	*	A-1298-911-A	A COMPLETE PC BOARD (KV-29SL46)	
19	*	A-1298-840-A	A COMPLETE PC BOARD (KV-27S42)	
20		1-790-130-21	CORD, AC (KV-27S42/27S46)	
20		1-751-057-11	CORD, POWER (WITH CONNECTOR) 10A/125V (KV-29SL42/29XL42M/29SL46)	
20		1-769-796-31	CORD, POWER (WITH CONNECTOR) 10A/125V (KV-29SL42C)	
21		1-453-268-21	FBT ASSY NX-4005//X4J4	
22		1-766-374-11	PLUG, F-PIN	
23	*	A-1195-154-A	P COMPLETE PC BOARD (KV-27S46/29SL46)	
24		4-063-572-02	COVER, REAR	
25		4-064-646-01	CHASSIS, CLIP	
27		4-040-388-01	HOLDER (S), DGC (EXCEPT KV-29SL46)	
28		8-598-431-00	TUNER, FSS BTF-WA411	
29		4-062-047-01	PIECE A(110), CONV CORRECT	
30		1-452-032-00	MAGNET,DISC	

Self Diagnosis Supported model

SERVICE MANUAL BA-4D CHASSIS

KV-27S42	*RM-Y165*	*US*	*SCC-S27H-A*
KV-27S42	*RM-Y165*	*CND*	*SCC-S28F-A*
KV-27S46	*RM-Y167*	*US*	*SCC-S27K-A*
KV-27S66	*RM-Y167*	*US*	*SCC-S27L-A*
KV-27S66	*RM-Y167*	*CND*	*SCC-S28G-A*
KV-29AL42	*RM-Y165*	*E*	*SCC-S25U-A*
KV-29AL42C	*RM-Y165*	*E*	*SCC-S25Y-A*
KV-29AL66	*RM-Y167*	*E*	*SCC-S25T-A*
KV-29AL66C	*RM-Y167*	*E*	*SCC-S25V-A*
KV-29SL42	*RM-Y165*	*E*	*SCC-S25W-A*
KV-29SL42C	*RM-Y165*	*E*	*SCC-S25S-A*
KV-29SL46	*RM-Y167*	*E*	*SCC-S25X-A*
KV-29XL42M	*RM-Y165*	*MX*	*SCC-S26C-A*
KV-29SL43	*RM-Y165*	*E*	*SCC-S55C-A*
KV-29SL43C	*RM-Y165*	*E*	*SCC-S55D-A*

CORRECTION - 3

Subject: Q550 P/N Correction

Correct the service manual as shown below.
File this correction with the service manual.

☛ : **Modified Item**

Section 8: Electrical Parts List (Page 55)

INCORRECT

REF NO.	PART NO.	DESCRIPTION	REMARK
Q550	8-729-119-78	TRANSISTOR 2SC2785-HFE	

CORRECT

REF NO.	PART NO.	DESCRIPTION	REMARK
☛ Q550	8-729-422-27	TRANSISTOR 2SD601A-Q	

TRINITRON® COLOR TV

SONY®

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

English
2001HJ74405-1
Printed in U.S.A.
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9-965-857-93